Sequence 94, Appl Sequence 87, Appl Sequence 88, Appl Sequence 90, Appl Sequence 2, Appli Sequence 2, Appli

2, Appli 2455, Ap 24, Appl 4, Appli 139, App

Sequence 428, Sequence 492, Sequence 847, Sequence 20, A Sequence 245, Sequence 245, Sequence 27, A Sequence 38, A Sequence 39, A Sequence 92, A Sequence 92, A Sequence 94, A Sequence 98, A Sequence 98

US-10-120-604-4
US-10-120-644-139
US-10-225-57A-428
US-10-295-027-492
US-10-295-027-810
US-10-295-027-810
US-10-295-027-817
US-10-295-027-817
US-10-295-027-817
US-10-295-027-817
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-741-657A-2
US-10-768-181-2
US-10-500-240-94
US-10-500-240-94
US-10-500-240-98
US-10-500-240-98
US-10-500-240-98
US-10-500-240-98
US-10-500-240-98
US-10-500-240-98
US-10-500-240-98

Sequence 2, Appli Sequence 236, App Sequence 226, App Sequence 220247, Sequence 279922, Sequence 21153, Sequence 21153,

2, Appli 4, Appli 6, Appli 2, Appli

US-10-473-339-2 US-10-036-328A-4 US-10-036-328A-6 US-10-036-328A-2 US-10-097-065-236 US-10-372-876-236 US-10-424-599-220247

Sequence 2, 1 Sequence 2, Sequence 4, Sequence 6,

```
IVELL, RICHARD

IVELL, RICHARD

NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: NIXON & VANDERHYE P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
STATE: VA
STATE: VA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/668,181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/041,745
FILING DATE: «UNKNOWN»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: SADOFF, B.J.
REGISTRATION NUMBER: 35,663
REFERENCE/DOCKET NUMBER: 35-125
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10668181
Publication No. US2005022439A1
GENERAL INFORMATION:
APPLICANT: OSTERHOFF, CAROLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 24-Sep-2003
CLASSIFICATION: <Unknown>
US-10-668-181-6
  RESULT 1
 Sequence 490, App
Sequence 18, Appl
Sequence 16, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 22, Appl
Sequence 24, Appl
                                                                                       October 20, 2005, 07:26:03 ; Search time 62 Seconds (without alignments) 67.337 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications AA:*

1: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO7_\text{PUBCOMB.pep:*} \)

2: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO6_\text{NEW}_\text{PUB.Dep:*} \)

3: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO6_\text{NEW}_\text{PUB.Dep:*} \)

4: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO6_\text{NEW}_\text{PUB.Dep:*} \)

5: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO6_\text{PUBCOMB.pep:*} \)

6: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO8_\text{NEW}_\text{PUB.Dep:*} \)

7: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO8_\text{NEW}_\text{PUB.Dep:*} \)

9: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO8_\text{PUBCOMB.pep:*} \)

10: \( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

11: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

12: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

13: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

14: \\\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

15: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

16: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

17: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

18: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

19: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

10: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

11: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

12: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

13: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

14: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

15: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

16: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} \)

17: \\( \cgn2_6/\text{prodata}/2/\text{pubpaa}/USO9_\text{PUBCOMB.pep:*} 
                                                                                                                                                                                                                                                                                     1862951
             5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-818-264-4

US-10-473-339-4

US-10-273-027-490

US-10-173-999-18

US-10-173-999-16

US-10-173-999-14

US-10-173-999-22

US-10-173-999-22

US-10-173-999-22
                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-668-181-6
                                                                                                                                                                                                                                                     1862951 segs, 417491010 residues
           GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                    sw model
                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                protein search, using
                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                US-10-668-181-6
                                                                                                                                                                               1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10000
10000
10000
10000
10000
10000
                                                                                                                                                                  Perfect score:
                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein -
                                                                                                                                                                                  Seguence:
                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
```

ALIGNMENTS

~

ö

Gaps

```
Sequence 490, Application US/10295027

Sequence 490, Application US/10295027

SEQUENCE 10 (US20002023250A1

SEQUENCE 10 (US20000223250A1

APPLICANT: Afar, Daniel

APPLICANT: Glabergy, Wendy M.

APPLICANT: Glabergy, Wendy M.

APPLICANT: Glabergy, Wendy M.

APPLICANT: Glabergy, Wendy M.

APPLICANT: Glabergy, Method of Laboral APPLICANT: Glabergy, Richard

APPLICANT: Watson, Susan R.

BRIOR FILING DATE: 2000-99-15

PRIOR APPLICANTION NUMBER: US 60/330, 666

PRIOR APPLICANTION NUMBER: US 60/330, 373

PRIOR APPLICANTION NUMBER: US 60/330, 374

PRIOR APPLICANTION NUMBER: US 60/340, 376

PRIO
                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 936;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 63; DB 15; Length 9
100.0%; Pred. No. 0.13;
ative 0; Mismatches 0; Indels
                                                                Indels
                             Best Local Similarity 100.0%; Pred. No. 0.072; Matches 10; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-173-999-18
; Sequence 18, Application US/10173999
; Publication No. US2004005563A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                    379 CWINNNAVFY 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 748 CWINNNAVFY 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Mack, David H. APPLICANT: Gish, Kurt C.
                                                                                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-295-027-490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
                                                                                                                                                                                 q
                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4. Application US/09818264

Sequence 4. Application US/09818264

Patent No. US20020142951A1

GENERAL INFORMATION:

APPLICANT: WEBSTER, Marion et al.

TITLE OF INVENTION: ISOLATED HUMAN G-PROTEIN COUPLED

TITLE OF INVENTION: PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR

TITLE OF INVENTION: PROTEINS, AND USES THEREOF

TITLE OF INVENTION: PROTEINS, AND USES THEREOF

CURRENT PELLIGATION NUMBER: US/09/818,264

CURRENT FILING DATE: 2010-03-28

NUMBER OF SEQ ID NOS: 5

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 4

LENGTH: 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/10473339
Publication No. US20040171540A1
GENERAL INFORMATION:
FUNDERAL INFORMATION:
TITLE OF INVENTION: ISOLATED HUMAN G-PROTEIN COUPLED
TITLE OF INVENTION: RECEPTORS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR
TITLE OF INVENTION: REFERENCE: CL001193
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
FILE REFERENCE: CL001193
CURRENT PAPLICATION NUMBER: 2003-09-29
PRIOR APPLICATION NUMBER: PCT/US02/09317
PRIOR APPLICATION NUMBER: DCT/US02/09317
PRIOR FILING DATE: 2001-03-27
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH 513
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 63; DB 16; Length 513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 63; DB 9; Length 513; Best Local Similarity 100.0%; Pred. No. 0.072; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                      Query Match , 100.0%; Score 63; DB 18; Length 10; Best Local Similarity 100.0%; Pred. No. 0.0018; Matches 10; Conservative 0; Mismatches 0; Indels
TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 10 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-10-668-181-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  379 CWINNNAVEY 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CWINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-818-264-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-473-339-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-473-339-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-818-264-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

ö

Gaps

```
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 488
LENGTH: 967
NUMBER OF SEQ ID NOS: 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 8
US-10-173-999-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-173-999-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 16
LENGTH: 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                 TITLE OF INVENTION: Methods of Diagnosis of Ovarian Cancer, Compositions
TITLE OF INVENTION: Methods of Screening for Modulators of Ovarian
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
TITLE OF INVENTION: Cancer
CENTRENT APPLICATION NUMBER: US/10/173,999
CURRENT APPLICATION NUMBER: US 60/299,234
PRIOR PILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR FILING DATE: 2001-08-27
PRIOR PILING DATE: 2001-01-11-13
PRIOR FILING DATE: 2001-04-12
PRIOR FILING DATE: 2001-04-12
NUMBER OF SEQ ID NOS: 163
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Heveral, Peter A.
APPLICANT: Heveral, Peter A.
APPLICANT: Marck, David H.
APPLICANT: Wark, David H.
APPLICANT: Wark, David H.
APPLICANT: Wark, David H.
APPLICANT: Warkon, Susan R.
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: MARBER: US/022-11-13
PRIOR PILING DATE: 2000-09-15
PRIOR FILING DATE: 2001-11-13
PRIOR PILING DATE: 2001-11-15
PRIOR PILING DATE: 2001-11-21
PRIOR PILING DATE: 2001-11-21
PRIOR PILING DATE: 2001-11-21
PRIOR PILING DATE: 2001-11-2-14
PRIOR PILING DATE: 2001-11-2-14
PRIOR PILING DATE: 2001-11-2-14
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-01-09
PRIOR APPLICATION NUMBER: US 60/335,250
PRIOR PILING DATE: 2002-01-09
PRIOR PILING DATE: 2002-01-09
PRIOR APPLICATION NUMBER: US 60/356,714
PRIOR APPLICATION NUMBER: US 60/356,714
PRIOR PILING DATE: 2002-02-03
PRIOR PILING DATE: 2002-01-10
PRIOR PILING DATE: 2002-02-03
PRIOR PILING DATE: 2002-02-08
PRIOR PILING DATE: 2002-02-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 63; DB 15; Length 936;
Best Local Similarity 100.0%; Pred. No. 0.13;
Matches 10; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 488, Application US/10295027
Publication No. US20030232350Al
GENERAL INFORMATION:
Eos Biotechnology, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Afar, Daniel
APPLICANT: Aziz, Natasha
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Gish, Kurt C.
APPLICANT: Glynne, Richard
APPLICANT: Hevezi, Peter A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||||||||
748 CWINNAVFY 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-173-999-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

```
Sequence 16, Application US/10173999;
Publication No. US20040005563A1
GENERAL INFORMATION:
APPLICANT: Mack, David H.
APPLICANT: Gish, Kurt C.
APPLICANT: Gish, Kurt C.
APPLICANT: Be Bictechnology, Inc.
APPLICANT: Be Bictechnology, Inc.
APPLICANT: and Methods of Diagnosis of Ovarian Cancer.
TITLE OF INVENTION: and Methods of Screening for Modulators of Ovarian
TITLE OF INVENTION: and Methods of Screening for Modulators of Ovarian
TITLE OF INVENTION: Gancer
FILE REPERENCE: 018501-0024008
CURRENT APPLICATION NUMBER: US 60/299,234
FRIOR APPLICATION NUMBER: US 60/299,234
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR APPLICATION NUMBER: US 60/315,246
PRIOR APPLICATION NUMBER: US 60/312,246
PRIOR FILING DATE: 2001-01-13
PRIOR FILING DATE: 2001-01-13
PRIOR FILING DATE: 2001-04-12
NUMBER OF SEQ ID NOS: 163
SOFTWARE: PATENTIN VEY: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 14, Application US/10173999
; Sequence 14, Application US/10173999
; Publication No. US20040005563A1
; GENERAL INFORMATION:
; APPLICANT: Mack, David H.
; APPLICANT: Bos Biotechnology, Inc.
; APPLICANT: Bos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Screening for Modulators of Ovarian
; TITLE OF INVENTION: Cancer;
; TILE REFERENCE: 018501-002420US
; CURRENT APPLICATION NUMBER: US (10/173,999
; CURRENT FILING DATE: 2002-06-17
; PRIOR APPLICATION NUMBER: US 60/299,234
; RIOR FILING DATE: 2001-06-18
                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 967;
                                                                                                        Length 967;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                      Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 63; DB 15;
100.0%; Pred. No. 0.13;
tive 0; Mismatches 0;
                                                                                                  100.0%; Score 63; DB 15; 100.0%; Pred. No. 0.13;
                                                                                                                                                      .
                                                                                                  Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                            728 CWINNAVFY 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      728 CWINNAVFY 737
                                                                                                                                                                                                           1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAVFY 10
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-295-027-488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens
US-10-173-999-16
```

```
Sequence 4, Application US/10054044A

Publication No. US20030096345A1

GENERAL INFORMATION:

APPLICANT: GLUCKSMANN, Maria A

TITLE OF INVENTION: 15569, A NOVEL HUMAN G PROTEIN COUPLED RECEPTOR AND USES THEREFOR FILE REFERENCE: 10147-60U1

CURRENT APPLICATION NUMBER: US/10/054,044A

CURRENT FLING DATE: 2002-04-19

PRIOR APPLICATION NUMBER: US 60/263,253

PRIOR FLING DATE: 2001-01-22

NUMBER OF SEQ ID NOS: 4

SOFTWARE: Patentin version 3.1

SEQ ID NO 4
                                                                                                                                                                                                                                          Sequence 22, Application US/10173999

9 Bublication No. US2040005563A1

9 Publication No. US2040005563A1

9 Publication No. US2040005563A1

9 APPLICANT: Mack, David H.

9 APPLICANT: Mack, David H.

1 APPLICANT: Gish, Kurt C.

1 TITLE OF INVENTION: Methods of Diagnosis of Ovarian Cancer, Cancer

1 TITLE OF INVENTION: Cancer

2 FILE REFERENCE: 018601-0042408

1 FILE REFERENCE: 018601-0042408

1 PRIOR PILING DATE: 2001-06-18

1 PRIOR APPLICATION NUMBER: US 60/315,246

1 PRIOR FILING DATE: 2001-11-13

2 PRIOR FILING DATE: 2001-04-12

3 NUMBER OF SEQ ID NOS: 163

5 COFFWARE: PatentIn Ver. 2.1
                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 63; DB 14; Length 1014; 100.0%; Pred. No. 0.14; tive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 63; DB 15; Length 1000; 100.0%; Pred. No. 0.14; ive 0; Mismatches 0; Indels 0.
                     Indels
                     ö
                     Mismatches
                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                  10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10; Conservative
                                                                                                                                761 CWINNNAVEY 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  761 CWINNNAVFY 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                775 CWINNNAVFY 784
                                                                           1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-054-044A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-054-044A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-173-999-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                     Matches
                                                                                                                         q
                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GUENERAL INCLORATION:

APPLICANT: Afar, Daniel

APPLICANT: Afar, Daniel

APPLICANT: Afar, Daniel

APPLICANT: Afar, Daniel

APPLICANT: Ginsberg, Wendy M.

APPLICANT: Ginsberg, Wendy M.

APPLICANT: Ginsberg, Wendy M.

APPLICANT: Ginsberg, Wendy M.

APPLICANT: Marcai, Peter A.

APPLICANT: Base Bookeeholds of Diagnosis of Cancer.

CURRENT FILING DATE: 2000-103-103

FILING DATE: 2000-11-13

PRIOR PILING DATE: 2001-11-13

PRIOR PILING DATE: 2001-11-13

PRIOR PILING DATE: 2001-11-15

PRIOR PILING DATE: 2001-11-12

PRIOR PILING DATE: 2001-11-12

PRIOR PILING DATE: 2001-11-13

PRIOR PILING DATE: 2001-11-29

PRIOR PILING DATE: 2001-11-14

                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 63; DB 15; Length 1000; Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 63; DB 15; Length 993; Best Local Similarity 100.0%; Pred. No. 0.13; Matches 10; Conservative 0; Mismatches 0; Indels (
PRIOR FILING DATE: 2001-08-27
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR PILING DATE: 2001-04-12
NUMBER OF SEQ ID NOS: 163
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 14
LENGTH: 993
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 486, Application US/10295027
Publication No. US20030232350A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               754 CWINNNAVFY 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          t TYPE: PRT
CORGANISM: Homo sapiens
US-10-295-027-486
                                                                                                                                                                                                                                                                                                            , ORGANISM: Homo sapiens
US-10-173-999-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-295-027-486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

ö

```
APPLICANT: Brown, Joseph P.
APPLICANT: Burmer, Glenna C.
APPLICANT: Burmer, Glenna C.
APPLICANT: Rough, Christine L.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTOR.
FILE REFERENCE: 1920-4-4
CURRENT APPLICATION NUMBER: 103/225,567A
CURRENT FILING DATE: 2000-12-19
PRIOR FILING DATE: 2000-12-19
NUMBER: OF SEQ ID NOS: 2292
SOFTWARE: Patentin version 3.1
SEQ ID NO 428
LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Marray, Richard
APPLICANT: Matson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Bos Batocechnology, Inc.
TITLE OF INVENTION: Methods of Disgnosis of Cancer,
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE APPERENCE: 108501-101250003
CURRENT APPLICATION NUMBER: US 09/663,733
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR FILING DATE: 2001-11-13
PRIOR PILING DATE: 2001-11-15
PRIOR PILING DATE: 2001-11-15
PRIOR PILING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/334,393
PRIOR PILING DATE: 2001-11-2
PRIOR PILING DATE: 2001-11-2
PRIOR PILING DATE: 2001-11-2
PRIOR PILING DATE: 2001-11-4
PRIOR PILING DATE: 2001-11-4
PRIOR PILING DATE: 2001-11-4
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-01-08
PRIOR PILING DATE: 2002-01-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 63; DB 14; Length 1014; Best Local Similarity 100.0%; Pred. No. 0.14; ... Matches 10; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-10-295-027-492
is Sequence 492, Application US/10295027
is Publication No. US20030232350A1
is GENERAL INFORMATION:
is APPLICANT: Afar, Daniel
is APPLICANT: Afar, Wendy M.
is APPLICANT: Ginaberg, Wendy M.
appLICANT: Gish, Kurt C.
appLICANT: Gish, Kurt C.
                  Sequence 428, Application US/10225567A Publication No. US20030113798A1; GENERAL INFORMATION: APPLICANT: LifeSpan Biosciences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glynne, Richard
Hevezi, Peter A.
Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
JS-10-225-567A-428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-225-567A-428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                          Sequence 139, Application US/10120604

Sequence 139, Application US/10120604

CENERAL INCRMATION:

APPLICANT: Bristol-Myers Squibb Company

TITLE OF INVENTION: HGPREMY28 AND HGPREMY29, AND SPLICE VARIANTS THEREOF

TITLE OF INVENTION: HGPREMY28 AND HGPREMY29, AND SPLICE VARIANTS THEREOF

TITLE OF INVENTION: HGPREMY28 AND HGPREMY29, AND SPLICE VARIANTS THEREOF

CURRENT APPLICATION NUMBER: US/10/120,604

CURRENT FILING DATE: 2001-04-11

PRIOR FILING DATE: 2001-04-11

PRIOR PILING DATE: 2001-04-11

PRIOR PILING DATE: 2001-04-11

PRIOR APPLICATION NUMBER: US 60/288,468

PRIOR PILING DATE: 2001-05-03

PRIOR PILING DATE: 2001-05-03

PRIOR PILING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 226

SOFTWARE: PARCHELL PARCHEL NOS: 226

SEQ ID NO 139

LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 63; DB 14; Length 1014;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 10; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 63; DB 14; Length 1014; Best Local Similarity .100.0%; Pred. No. 0.14; Matches 10; Conservative 0; Mismatches 0; Indels 0
                                       Sequence 4, Application US/10120604
Publication No. US20030096347A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            775 CWINNNAVEY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-10-120-604-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-10-120-604-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

a ò

```
Sequence 847, Application US/10295027
Publication No. US20030232350A1
                                                                                                                                                                                                                                    APPLICANT: Afar, Daniel
APPLICANT: Atlz, Nateasha
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Gish, Kurt C.
APPLICANT: Gish, Kurt C.
APPLICANT: Hevel, Fichard
APPLICANT: Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
           775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            775 CWINNNAVEY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-295-027-847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-173-999-20
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Marray, Bichard
APPLICANT: Matray, Richard
APPLICANT: Mateon, Susan R.
APPLICANT: Mateon, Susan R.
APPLICANT: Mateon, Susan R.
TITLE OF INVENTION: Methods of Diagnosis of Cancer.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer.
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer.
FILE REFERENCE: 01850-101250013
CURRENT APPLICATION NUMBER: US 99/663,733
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR PILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR PILING DATE: 2001-11-29
PRIOR PILING DATE: 2001-11-29
PRIOR PILING DATE: 2001-11-29
PRIOR PILING DATE: 2001-12-19
PRIOR PILING DATE: 2001-12-19
PRIOR PILING DATE: 2001-12-19
PRIOR PILING DATE: 2001-12-14
PRIOR PILING DATE: 2002-01-10
PRIOR PILING DATE: 2002-01-10
PRIOR PILING DATE: 2002-01-10
PRIOR PILING DATE: 2002-01-10
PRIOR PILING DATE: 2002-02-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1386
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 810
LENGTH: 1014
Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1386 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 492 LENGTH: 1014
                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 63; DB 15; Length 1014; Best Local Similarity 100.0%; Pred. No. 0.14; Matches 10; Conservative 0; Mismatches 0; Indels 0.
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 10; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 810, Application US/10295027
Publication No. US20030232350A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Afar, Daniel
APPLICANT: Aziz, Natasha
APPLICANT: Ginsberg, Wendy M.
APPLICANT: Ginsh, Kurt C.
APPLICANT: Gish, Kurt C.
APPLICANT: Hevezi, Peter A.
APPLICANT: Mack, David H.
                                                                                                                                                                                                                                                                                                                                                                                                                775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                               1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                        ; ORGANISM: Homo sapiens
US-10-295-027-492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-295-027-810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-295-027-810
                                                                                                                                              TYPE: PRT
```

```
APPLICANT: Marzay, Richard H.
APPLICANT: Marzay, Richard H.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Eds Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer,
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
CURRENT FILING DATE: 2010-101250003
PRIOR PELLOATION NUMBER: US 99/663,733
PRIOR PELLOATION NUMBER: US 60/350,666
PRIOR PELLING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/344,393
PRIOR PELLING DATE: 2001-11-29
PRIOR PELLING DATE: 2002-01-08
PRIOR PELLING DATE: 2002-01-08
PRIOR PELLING DATE: 2002-01-09
PRIOR PELLING DATE: 2002-01-09
PRIOR PELLING DATE: 2002-01-09
PRIOR PELLING DATE: 2002-01-09
PRIOR PELLING DATE: 2002-02-03
PRIOR PELLING DATE: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20, Application US/10173999
Publication No. US20040005563A1
GENERAL INFORMATION:
APPLICANT: Mack, David H.
APPLICANT: Gish, Kurt C.
TITLE OF INVENTION: Methods of Diagnosis of Ovarian Cancer, Compositions
TITLE OF INVENTION: APPLICANT: Cancer Methods of Screening for Modulators of Ovarian
TITLE OF INVENTION: Cancer Cancer Compositions
TITLE OF INVENTION: Cancer Cancer Compositions
FILE REPERENCE: 018501-002420US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 63; DB 15; Length 1014;
100.0%; Pred. No. 0.14;
tive 0; Mismatches 0; Indels 0
```

ö

δ

```
LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-349-528-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-11-070-456-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-070-456-4
            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                             δ
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 20
US-10-723-860-2455

Sequence 2455, Application US/10723860

Publication No. US20040253606A1

GENERAL INFORMATION:

APPLICANT: Aliz, Natasha

TITLE OF INVENTION: Methods of Diagnosis of Soft Tissue Sarcoma Modulators

TITLE OF INVENTION: Methods for Screening for Soft Tissue Sarcoma Modulators

FILE REFERENCE: 05882.0193.RPUSOI

CURRENT APPLICATION NUMBER: US/10/723,860

CURRENT APPLICATION NUMBER: 00/429,739

PRIOR FILING DATE: 2002-11-26

PRIOR FILING DATE: 2002-11-26

NUMBER OF SEQ ID NOS: 8393

SOFTWARE: Patentin version 3.2

SEQ ID NO 2455

LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                         .100.0%; Score 63; DB 15; Length 1014; 100.0%; Pred. No. 0.14; cive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 63; DB 16; Length 1014; 100.0%; Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/10741657A
Publication No. US20040197325A1
GENERAL INFORMATION:
APPLICANT: Protein Design Labs
TITLE OF INVENTION: ANTIBODIES AGAINST GPR64 AND USES THEREOF
FILE REPERBENCE: 05882.017.NUS0301
CURRENT APPLICATION NUMBER: US/10/741,657A
NUMBER: OF SEQ ID NOS: 30
SOFTWARE: PLING DATE: 2003-12-19
SEQ ID NO 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
CURRENT APPLICATION NUMBER: US/10/173,999
CURRENT FILING DATE: 2002-06-17
PRIOR APPLICATION NUMBER: US 60/299,234
PRIOR PILING DATE: 2001-06-18
PRIOR PILING DATE: 2001-06-27
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-04-12
NUMBER OF SEQ ID NOS: 163
SOFTWARE: PATENT NOS: 163
SOFTWARE: PATENT NOS: 163
SOFTWARE: PATENT NOS: 163
SOFTWARE: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                               ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-173-999-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-741-657A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-741-657A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             쉽
```

```
Sequence 4, Application US/11070456

Publication No. US20050148016A1

Sequence 4, Application US/11070456

Publication No. US20050148016A1

APPLICANT: Bristol-Myers Squibb Company

TITLE OF INVENTION: NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR HGPRBMY298v1 POLYPEPTIDES

FILE REPERBENCE: D0143 D1v1

CURRENT APPLICATION NUMBER: US/11/070,456

CURRENT PILING DATE: 2005-03-02

PRIOR FILING DATE: 2001-04-11

PRIOR APPLICATION NUMBER: US 60/283,161

PRIOR APPLICATION NUMBER: US 60/288,468

PRIOR APPLICATION NUMBER: US 60/283,161

PRIOR APPLICATION NUMBER: US 60/288,468

PRIOR APPLICATION NUMBER: US 60/288, 468

PRIOR APPLICATION NUMBER: US 60/288, 468

PRIOR APPLICATION NUMBER: US 60/280,619

PRIOR APPLICATION NUMBER: US 60/280,619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: GOPAL, Shuba
APPLICANT: GOPAL, Shuba
APPLICANT: GOPAL, Shuba
APPLICANT: FEDER, Gabe
APPLICANT: FEDER, Gabe
APPLICANT: FEDER, Gabe
APPLICANT: FEDER, Gabe
TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTOR (GPCR) VARIANTS AND METHODS OF
TITLE OF INVENTION: USE THEREOF
TITLE OF INVENTION: USE THEREOF
TITLE OF INVENTION: USE THEREOF
TITLE OF INVENTION WIMBER: US/10/349,528
CURRENT APPLICATION NUMBER: US/10/349,528
SURRENT FILING DATE: 2003-01-22
SOFTWARE: Patentin version 3.2
SEQ ID NO 24
                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 63; DB 16; Length 1014;
100.0%; Pred. No. 0.14;
tive 0; Mismatches 0; Indels 0
                                                                                                  Length 1014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 63; DB 20; Length 1014;
                                                                                           Query Match 100.0%; Score 63; DB 16; Length 1 Best Local Similarity 100.0%; Pred. No. 0.14; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 24, Application US/10349528; Publication No. US2040253668A1
GENERAL INFORMATION: APPLICANT: RAMANATHAN, Chandra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 226
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                               775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              775 CWINNNAVFY 784
                                                                                                                                                                                                                        1 CWINNNAVFY 10
; ORGANISM: Homo sapiens
US-10-723-860-2455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
```

ò 셤

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 63; DB 18; Length 1038; 100.0%; Pred. No. 0.14; tive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 63; DB 17; Length 1252; Best Local Similarity 100.0%; Pred. No. 0.17; Matches 10; Conservative 0; Mismatches 0; Indel9 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 38, Application US/10505486;
Publication No. US20050118639A1;
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Determination of a ligand;
FILE REFERENCE: P03-0006PCT;
CURRENT APPLICATION NUMBER: US/10/505,486;
CURRENT FILING DATE: 2004-08-20;
PRIOR FILING DATE: 2002-02-2;
PRIOR APPLICATION NUMBER: UP 2002-13949;
PRIOR PILING DATE: 2002-07-23;
PRIOR PELING DATE: 2002-07-23;
PRIOR PILING DATE: 2002-07-23;
PRIOR PILING DATE: 2002-07-23;
PRIOR FILING DATE: 2002-07-23;
PRIOR FILING DATE: 2002-10-11;
NUMBER OF SEQ ID NOS: 233
                                                                                                                                                                                                                                  ; TYPE: amino acid
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-668-181-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: October 20, 2005, 07:42:32
Job time : 62 secs
                          REGISTRATION NUMBER: 36,663
REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 35-12
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-816-4100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1038 amino acids
                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                799 CWINNNAVEY 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-505-486-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-505-486-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                             Sequence 139, Application US/11070456

Publication No. US20050148016A1

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION:

FILE REFERENCE: D0143 DIV1

CURRENT APPLICATION NUMBER: US/11/070,456

CURRENT APPLICATION NUMBER: US 60/283,145

PRIOR APPLICATION NUMBER: US 60/283,145

PRIOR APPLICATION NUMBER: US 60/283,145

PRIOR PILING DATE: 2001-04-11

PRIOR FILING DATE: 2001-06-11

PRIOR FILING DATE: 2001-06-11

PRIOR FILING DATE: 2001-65-03

NUMBER: US 60/283,161

PRIOR FILING DATE: 2001-65-03

NUMBER: US 60/283,161

PRIOR FILING DATE: 2001-65-03

NUMBER: US 60/283,161

PRIOR FILING DATE: 2001-65-03

NUMBER: PRIOR PRILING DATE: 2001-66-25

NUMBER OF SEQ ID NOS: 226

SOFTWARE: PATCHTIN VERSION 3.2
                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 63; DB 20; Length 1014;
100.0%; Pred. No. 0.14;
tive 0; Mismatches 0; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/10668181
Publication No. US20050202439A1
GENERAL INFORMATION:
APPLICANT: SUTERPOFF, CAROLINE
TITLE OF INVENTION: BPIDIDYMIS-SPECIFIC RECEPTOR PROTEIN
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: RIOPPY disk

MEDIUM TYPE: RIOPPY disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/NS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRING APPLICATION DATA:

APPLICATION NUMBER: US/10/668,181

FILING DATE: 24-Sep-2003

CLASSIFICATION: AUNKNOWN>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/041,745

FILING DATE: <UNKNOWN>
                                    Indels
                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: NIXON & VANDERHYE P.C.
STREET: 1100 NORTH GLEBE ROAD, 8TH FLOOR
       Pred. No. 0.14;
100.0%; Prec. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.
Best Local Similarity 100.
Matches 10, Conservative
         Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: ARLINGTON STATE: VA
                                                                                                        775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  775 CWINNNAVFY 784
                                                                              1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-070-456-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                RESULT 23
US-11-070-456-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-668-181-2
```

ò g

```
CITY: Waltham
                                                                                                                                                                                                                                                                                                                                                   Patent No. 6583275
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                         US-09-107-532A-7216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGINAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE
Sequence 9574, Ap
Sequence 931, Ap
Sequence 8, Appli
Sequence 28726, A
Sequence 72, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 73, Appl
Sequence 17615, A
Sequence 3, Appli
Sequence 9, Appli
Sequence 16366, A
Sequence 16366, A
Sequence 101, Appl
Sequence 101, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12473, A
4649, Ap
2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7, Appli
Sequence 5904, Ap
Sequence 37, Appl
Sequence 31, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7216, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2, Appl:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                        (without alignments)
35.547 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                         ; Search time 21 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/1/iaa/SA_COMB.pep:*
/cgn2_6/ptodata/1/iaa/SB_COMB.pep:*
/cgn2_6/ptodata/1/iaa/AA_COMB.pep:*
/cgn2_6/ptodata/1/iaa/AB_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-919-497-80
US-09-916-957-80
US-09-946-911-9574
US-08-846-762-8
US-08-947-965-72
US-08-947-965-73
US-09-248-796A-17615
US-09-947-967-17615
US-09-112-498A-9
US-09-112-498A-9
US-09-248-796A-16368
US-09-248-796A-16368
US-09-543-681A-5732
US-09-543-681A-5732
US-08-871-355A-101
US-08-871-355A-101
US-09-201-945-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-489-039A-12473
US-09-134-001C-4649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -09-328-352-5904
-09-071-252-37
                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -09-112-498A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-408-095-31
US-08-947-965-70
                                                                                                                                                                                                                                       513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                               - protein search, using sw model
                                                                                         October 20, 2005, 05:49:15
                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                             Issued Patents AA:*
                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                US-10-668-181-6
                                                                                                                                                                      1 CWINNAVPY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length
                                                                                                                                                                                                    Scoring table:
                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein
                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
```

```
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                  Sequence 53706, A Sequence 72, Appl Sequence 6014, Appl Sequence 70, Appl Sequence 5540, Ap Sequence 1086, A Sequence 15937, A Sequence 20781, A Sequence 20781, A Sequence 20314, Ap Sequence 3934, Ap Sequence 5, Appli
                                                              38489, A
53706, A
                   Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
                                    US-09-129-030-24
US-09-270-76-738489
US-09-270-76-53706
US-09-071-035-72
US-09-134-000C-6014
US-09-138-352-5540
US-09-9801-874-5
US-09-949-016-7087
US-09-949-016-7087
US-09-902-540-15937
US-09-2016-7087
US-09-2016-7087
US-09-2016-7087
US-09-2016-7087
US-09-2016-7087
                                                                                                                                                                                                                                                                                                                                        US-09-621-976-3934
US-09-621-976-3935
US-09-433-241A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURDING TYPE: CD/ROM ISO9660
COMPUTER: PC
COMPUTER: PC
COMPUTER: PC
COMPUTER: PC
COMPUTER: PC
COMPUTER: PC
COMPUTER: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: JUNY 2, 1997
ATTORNEY/AGENT INFRMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: misc_feature; LOCATION: (B) LOCATION 1...314; SEQUENCE DESCRIPTION: SEQ ID NO: 7216: US-09-107-532A-7216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REPERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7216, Application US/09107532A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 7216:
SEQUENCE CHARACTERISTICS:
LENGTH: 314 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 7310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 02354
COMPUTER READABLE FORM:
```

```
APPLICANT: Mutter, George L.

TITLE OF INVENTION: PROGNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER FILE REFERENCE: B0801/7225
FILE REFERENCE: B0801/7225
CURRENT APPLICATION NUMBER: US/09/919,497
CURRENT FILING DATE: 2001-07-31
PRIOR APPLICATION NUMBER: US 60/221,735
PRIOR PLING DATE: 2000-07-31
NUMBER OF SEQ ID NOS: 100
SOFTWARE: Patentin version 3.0
SEQ ID NOS: 100
                                                                                                                                                                                                                                         LENGTH: 440
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-919-497-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-949-016-9574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
US-09-976-594-931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                      Gaps
                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                      DB 4; Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63.5%; Score 40; DB 4; Length 440; 60.0%; Pred. No. 1e+02;
                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Lander, Eric S.
APPLICANT: Daley, George Q.
APPLICANT: Daley, George Q.
APPLICANT: Daley, George Q.
APPLICANT: Treland, James S.
APPLICANT: Ireland, James S.
APPLICANT: Ireland, James S.
APPLICANT: Ireland, James S.
TITLE OF INVENTION: CODING SEQUENCE POLYMORPHISMS
TITLE OF INVENTION: IN VASCULAR PATHOLOGY GENES
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
ADDRESSEE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/09/054,272
FILING DATE: 01-APR-1998
CLASSIFICATION NUMBER: US/20/272
FILING DATE:
APPLICATION NUMBER: SISTEMATION:
NAME: Granahan, Particia
                      Score 41; DB
Pred. No. 49;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                                                                                           ; Sequence 34, Application US/09054272; Patent No. 6692909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 34: SEQUENCE CHARACTERISTICS: LENGTH: 440 amino acids TYPE: amino acid strandedness: single
                      65.1%;
Query Match
Best Local Similarity 55.6
Best Local Si Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 781-861-62'
TELEFAX: 781-861-9540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||:| | |
98 CWIDNTRVVY 107
                                                                                                                                   |:|| :||
289 WVNNKRIFY 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CWINNNAVFY 10
                                                                                                          2 WINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 6; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                  RESULT 2
US-09-054-272-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-054-272-34
                                                                                                            ઠે
                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
```

```
Sequence 931, Application US/09976594

Patent No. 6673549

GENERAL INFORMATION:
APPLICANT: FURNESS, Michael
APPLICANT: FURNESS, Michael
APPLICANT: FURNESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
CURRENT APPLICATION NUMBER: US/09/976,594
CURRENT FILING DATE: 2001-10-12
PRIOR FILING DATE: 2000-10-12
NUMBER OF SEQ ID NOS: 1143
                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
Score 40; DB 4; Length 440;
Pred. No. 1e+02;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63.5%; Score 40; DB 4; Length 443; 60.0%; Pred. No. 1e+02; 1:ve 1; Mismatches 3; Indels
 63.5%;
 Query Match 63.5
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                        98 CWIDNTRVVY 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101 CWIDNTRVVY 110
                                                        1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CWINNNAVFY 10
```

; Sequence 80, Application US/09919497 ; Patent No. 6773883

RESULT 3 US-09-919-497-80

ò

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-947-965-73
US-08-947-965-73
US-08-947-965-73
Sequence 73, Application US/08947965A
Fatent No. 6004790
GENERAL IN-FORMATION:
APPLICANT: Dijkhuizen, Lubbert
APPLICANT: Dijkhuizen, Carten
APPLICANT: Andersen, Carten
APPLICANT: Andersen, Carten
APPLICANT: Osten, Claus von der
ITTLE OF INVENTION: Cyclomaltodextrin Glucanotransferase
FILE REFERRNCE: 4285.204-US
CURRENT FILING DATE: 1997-10-09
EARLIER APPLICATION NUMBER: 0477/95
EARLIER APPLICATION NUMBER: 1173/95
EARLIER APPLICATION NUMBER: 1201/95
EARLIER FILING DATE: 1995-10-17
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1996-04-22
NUMBER OF SEQ ID NOS: 78
SOFTHARE: FateSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Dijkstra, Lubbert
APPLICANT: Dijkstra, Bauke
APPLICANT: Dijkstra, Bauke
APPLICANT: Dijkstra, Bauke
APPLICANT: Dijkstra, Bauke
APPLICANT: Osten, Classten
APPLICANT: Osten, Classten
TITLE OF INVENTION: Cyclomaltodextrin Glucanotransferase
TITLE OF INVENTION: Variants
TITLE OF INVENTION: Variants
TITLE OF INVENTION: Variants
CURRENT APPLICATION NUMBER: US/08/947,965A
CURRENT FILING DATE: 1997-10-09
EARLIER FILING DATE: 1997-10-17
EARLIER FILING DATE: 1995-10-17
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1995-11-16
EARLIER FILING DATE: 1996-04-22
EARLIER FALING DATE: 1996-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 38; DB 3; L.L.,
Pred. No. 3.4e+02;
Pred. Triches 2; Indels
                                               Indels
                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                             Sequence 72, Application US/08947965A Patent No. 6004790 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60.3%;
55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 55.0
Local 5; Conservative
Best Local Similarity 44.4
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              413 WINNDVIIY 421
                                                                                                                                                               |:||| :::
28 WVNNNYIYH 36
                                                                                                                   2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 WINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Bacillus sp. US-08-947-965-72
                                                                                                                       ઠે
                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20126, Application US/09252991A

Sequence 20126, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:

PAPLICATION: MICHEL ALINE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

LENTH: 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/08846762A
Patent No. 5994072
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lam, Joseph S.
APPLICANT: Charter, Deborah
APPLICANT: Charter, Deborah
APPLICANT: General Deportance of Control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                             Score 39; DB 4; Length 541; Pred. No. 1.8e+02; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 38; DB 2; Length 438;
Pred. No. 2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60.3%; Score 38; DB 4; Length 439;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                  FEATURE:
NAME/KEY: misc feature
NAME INFORMATION: Incyte ID No. 6673549 1530186CD1
US-09-976-594-931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-08-846-762-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-28726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60.3%;
                                                                                                                                                                                                                                                                                                                                                                                 61.9%;
                                                                                                                                                                                                                                                                                                                                                                         Query Match 61.9
Best Local Similarity 50.0
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 60.3
Best Local Similarity 44.4
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304 CWIQDPVIFY 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAVFY 10
                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |:||| :::
27 WVNNNYIYH 35
SOFTWARE: PERL Program
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-252-991A-28726
                               SEQ ID NO 931
LENGTH: 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-08-846-762-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

ò g

```
MICROBIAL SWOLLENIN PROTEIN, DNA SEQUENCES ENCODING SUCH SWOLLENINS AND METHOD OF PRODUCING SUCH SWOLLENINS
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Description of Artificial Sequence: rice expansin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                  Score 37; DB 2; Length 222; Pred. No. 1.5e+02; Indels 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58.7%; Score 37; DB 3; Length 222; 66.7%; Pred. No. 1.5e+02; tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Cosgrove, Daniel J
APPLICANT: McQueen-Mason, Simon
APPLICANT: McQueen-Mason, Simon
APPLICANT: Guiltinan, Mark J
APPLICANT: Shcherban, Tatyana
APPLICANT: Shi, Jun
TITLE OF INVENTION: PREIFED EXPANSIN PROTEINS
FILE REFERENCE: 1194/1C114US3
CURRENT FILING DATE: 1998-06-05
EARLIER APPLICATION NUMBER: 08/440,517
EARLIER FILING DATE: 1995-05-12
EARLIER FILING DATE: 1994-05-12
SARLIER PILING DATE: 1994-05-12
SARLIER PILING DATE: 1994-05-12
SARLIER PILING DATE: 1994-05-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION: (14)..(58)
; OTHER INFORMATION: Xaa is unknown or other.
US-09-092-160-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MICROBIAL SWOLLE TITLE OF INVENTION: ENCODING SUCH SWITTLE OF INVENTION: SWOLLENINS NUMBER OF SEQUENCES: 31
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATIBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 3, Application US/09092160C; Patent No. 6255466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-112-498A-9; Sequence 9, Application US/09112498A; Patent No. 6458928; GENERAL INFORMATION:
                                                                                                                                                                                                  58.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                      Query Match
Best Local Similarity 66.7
   ; SEQUENCE CHARACTERISTICS:
; LENGTH: 222
; TYPE: AMINO ACID
; TOPOLOGY: UNKNOWN
US-08-440-517A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 58.7
Best Local Similarity 66.7
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                         2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                       5 WINAHATFY 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 WINAHATEY 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
APPLICANT: Keith Weinstock et al
APPLICANT: Keith Weinstook et al
APPLICANT: Keith Weinstook BLOOM AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.132
CURRENT APPLICATION NUMBER: US/09/246,796A
CURRENT FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR APPLICATION NUMBER: US 60/096,409
PRIOR FILING DATE: 1998-08-13
PRIOR FILING DATE: 1998-08-13
PRIOR FILING DATE: 1998-08-13
ROMBER OF SEQ ID NOS: 28208
SEQ ID NO 17615
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 37; DB 4; Length 208; Pred. No. 1.4e+02; A; Mismatches 2; Indels
                                                                                                                                       Length 686;
                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: COSGROVE, DANIEL J.;
APPLICANT: GULLTINAN, MARK;
APPLICANT: SHCHERBAN, TATYANA;
APPLICANT: SHCHERBAN, TATYANA;
APPLICANT: SHCHERES;
NUMBER OF SEQUENCES;
CORRESPONDENCE ADDRESS;
ADDRESSE: TENTELLECTUAL PROPERTY OFFICE, THE ADDRESSE: PENNSYLVANA STATE UNIVERSITY STRET: 113 TECHNOLOGY CENTER
CITY: UNIVERSITY PARK
                                                                                                                                60.3%; Score 38; DB 3; I
llarity 55.6%; Pred. No. 3.4e+02;
Conservative 2; Mismatches 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: DOS
SOFTWARE: WORDPERFECT 5.1
CHRENT APPLICATION DATA
APPLICATION NUMBER: US/08/440,517A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-248-796A-17615
; Sequence 17615, Application US/09248796A
; Patent No. 6747137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : PENNSYLVANIA
RY: UNITED STATES OF AMERICA
16802-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/08440517A
Patent No. 5959082
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION: 530
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58.7%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 16802-7000
COMBUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: NEC 286
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 40.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 CWVNSNYLVF 25
                                                                                                                                                                                                                                                                                                          |||||::|
413 WINNDVIIY 421
                                                                                                                                                                                                                                                                       2 WINNAVFY 10
; TYPE: PRT
; ORGANISM: Bacillus sp.
US-08-947-965-73
                                                                                                                                Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-248-796A-17615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-08-440-517A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM:
                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                           ð
```

Gaps

;; 0

Score 37; DB 4; Length 1272; Pred. No. 9.3e+02; 1; Mismatches 1; Indels

```
completed: October 20, 2005, 05:50:24 ne : 22 secs
                                                                                                          Query Match
Best Local Similarity 71.4%;
Matches 5; Conservative
                                         ; ORGANISM: Proteus mirabilis US-09-543-681A-5732
                                                                                                                                                                                                                         ||:| ||
719 CWVNPNA 725
                                                                                                                                                                                                  1 CWINNNA 7
                                                                                                                                                                                                                                                                                                            Search cor
Job time
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
US-09-248-76A-16368
; Sequence 16368, Application US/09248796A
; Sequence 16368, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: REICH Wedistock et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN:
; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.132 ·
; CURRENT APPLICATION NUMBER: US 60/074,725
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR APPLICATION NUMBER: US 60/074,725
; RIOR APPLICATION NUMBER: US 60/096,409
; RIOR FILING DATE: 1998-02-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 16368
; SEQ ID NO 16368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
US-09-543-681A-5732
US-09-543-681A-5732
Sequence 5732, Application US/09543681A
Patent No. 6605709
GENERAL INFORMATION:
APPLICANT: GARY BRETON
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABIL
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.1002-001
CURRENT APPLICATION NUMBER: US/09/543,681A
CURRENT FILING DATE: 2000-04-05
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 8344
SEQ ID NO 5732
LENGTH: 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                             Query Match 58.7%; Score 37; DB 4; Length 233; Best Local Similarity 66.7%; Pred. No. 1.6e+02; Matches 6; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 37; DB 4; Length 769;
Pred. No. 5.5e+02;
2; Mismatches 2; Indels
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/112,498A
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 98/14226
FILING DATE:
APPLICATION NUMBER: US 08/893,766
FILING DATE: 11-JUL-1997
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARATERISTICS:
LENGTH: 233 amino acids
TYPE: amino acid
TYPE: .... ''INKNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Candida albicans
US-09-248-796A-16368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 55.0
Percentive 5; Conservative
                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: unknown
// MOLECULE TYPE: protein
US-09-112-498A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||| | ::|
166 WINKNELYY 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ||| :| ||
16 WINAHATFY 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

## THIS PAGE BLANK (uspto)

```
October 20, 2005, 07:25:13; Search time 164 Seconds (without alignments) 23.583 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                         2105692
 5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                               2105692 segs, 386760381 residues
GenCore version
Copyright (c) 1993 - 2005
                                                                    OM protein - protein search, using sw model
                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                            US-10-668-181-6
                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                       Run on:
```

Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries A\_Geneseq\_16Dec04:\* 1: geneseqp1980s:\* Database

Minimum DB seq length: 0 Maximum DB seq length: 200000000

geneseqp1980s: geneseqp1990s: geneseqp2000s: geneseqp2001s: geneseqp2002s: geneseqp2003bs: geneseqp2003bs:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

	Human EST	Human G-p	Ovarian c	Jancer/an	Human epi	Ovarian c	Cancer/an	an epi	an epi	Ovarian c	Human epi	an epi	Ovarian c	Cancer/an	an epi			an G-p			an sec	Ovarian c	Cancer/an	Jancer/an	Cancer/an
ion	Hum	Hrm	S	Can	Hum	Q	Can	Human	Human	Q	Hum	Human	ova	Can	Human	8 8	Can	Can	Can						
Description	Aam24057	Abg73644	Adb80454	Adn39172	Adn88596	Adb80452	Adn39170	Adn88599	Adn88607	Adb80450	Adn88601	Adn88609	Adb80458	Adn39168	Adn88605	Adn88603	Aab01247	Abj38840	Abj38832	Abp81971	Abr61472	Adb80456	Adn39174	Adn39529	Adn39492
	~	~	7	7	~	~	7	1	~	~	7	~	7	~	~	~	~	7	~	~	~	~	7	~	~
	057	644	454	172	596	452	170	599	607	450	601	609	458	168	605	603	247	840	832	971	472	456	174	529	492
11	AAM24057	ABG73644	ADB80454	ADN39172	ADN88596	ADB80452	ADN39170	ADN88599	ADN88607	ADB80450	ADN88601	ADN88609	ADB80458	ADN39168	ADN88605	ADN88603	AAB01247	ABJ38840	ABJ38832	ABP81971	<b>ABR61472</b>	ADB80456	ADN39174	ADN3 9529	ADN39492
BB	4	9	7	7	æ	7	7	æ	œ	7	80	8	7	7	œ	ω	ო	ø	9	ø	ø	7	7	7	7
% Query Match Length DB	328	513	936	936	996	967	967	979	987	993	993	. 995	1000	1000	1001	1003	1013	1014	1014	1014	1014	1014	1014	1014	1014
& Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Score	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
Result No.	-	7	m	4	ហ	9	7	œ	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

79 Adp03579 Human GPC	o	36 Adq19636 Human Bof	Add09616 Human	8	7 Adn88597 Human	98 Adn88598 Human epi	Aaw36903 Human	Adn88606 Human	Adn88600 Human	Adn88608 Human	Adn88604 Human	Adn88602 Human	Adn88610 Human	Adf70415 Orphan	Aau99588	17 Adn88617 Mouse epi	Adn88613 Mouse	16 Adn88616 Mouse epi	5 Adn88615 Mouse		
7 ADP0357	8 AD02907	8 ADQ19636		8 ADN8859	8 ADN8859	8 ADN88598	2 AAW36903	8 ADN88606	8 ADN88600	8 ADN88608	8 ADN88604	8 ADN88602	8 ADN88610	7 ADF70415	5 AAU99588	8 ADN88617	8 ADN88613	8 ADN88616	8 ADN8861	71.14	
1014	1014	1014	1014	1017	1020	1033	1038	1041	1047	1049	1055	1057	1011	1252	717	982	993	0	1006		
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.7	2	85	α	85.7		
63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	54	54	54	54	54		
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		

## ALIGNMENTS

RESULT 1

```
Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse; tomato; monkey; dog; sea urchin; expressed sequence tag; BST; diagnostics; forensic test; gene mapping; genetic disorder; biodiversity; gene therapy; nutrition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention provides the protein and coding sequences of novel proteins from a variety of organisms, including human, dog, cat, horse, cow, pig, hamster, monkey, macaque, veast, bacteria, fruit fly, sea urchin and tomato. These were derived from expressed sequence tags (ESTs) from the organism of interest. They can be used in diagnostics, from the organism of interest. They can be used in diagnostics, forensics, gene mapping, identification of mutations, to assess biodiversity and for nutritional purposes. The present sequence is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolated polypeptide for treatment of diseases, diagnostics, raising antibodies and research use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        >
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Asundi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ζ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tang YT, Liu C, Zhou P, Qian XB, Wang
Cao Y, Drmanac RA, Zhang J, Werhman T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 20; Page 1081-1082; 1275pp; English.
                                                                                                           Human EST encoded protein SEQ ID NO: 1582.
             Ą.
          AAM24057 standard; protein; 328
                                                                                                                                                                                                                                                                                                                                                       25-JAN-2000; 2000US-00491404.
17-JUL-2000; 2000US-00617746.
03-AUG-2000; 2000US-00631451.
15-SEP-2000; 2000US-0063870.
                                                                                                                                                                                                                                                                                                                          25-JAN-2001; 2001WO-US002687
                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-476164/51.
N-PSDB; AAH98716.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                         WO200154477-A2.
                                                                                                                                                                                                                           Homo sapiens.
                                                                          12-OCT-2001
                                                                                                                                                                                                                                                                                         02-AUG-2001.
                                             AAM24057;
AAM24057
```

us-10-668-181-6.rag

```
related to the secretin receptor subfamily, described in the disclosure
               of the invention
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                   27-DEC-2002.
                                                                                                                                                                                                                                             ADB80454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                         RESULT 3
                                                                                                                                                                                                       ADB80454
  ន្តដូន
                                                                                                                                                                                                                     ò
                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  institution describes a mover numeral of the polypeptide. The invention also describes (1) an isolated antibody that selectively binds to the peptide; (2) an isolated mucleic acid comprising a sequence or its complement that hybridizes under stringent conditions to the opposite complement that hybridizes under stringent conditions to the opposite complement that hybridizes under stringent conditions to the opposite or the opposite strand of the sequence encoding the protease or its allelic variant, orthogo or fragment; (3) a gene chip comprising the isolated nucleic acid of (2); (5) a vector comprising the isolated nucleic acid of (2); (5) a vector comprising the isolated nucleic acid of (2); (6) a host cell containing the vector of (5); (7) a method for producing the novel peptide; (8) detecting the presence of the novel peptide or uncleic acid of (2) in a sample; (9) identifying a modulator of, the novel peptide; (10) a pharmaceutical composition comprising the agent that binds to, the novel peptide and a carrier; (11) treating a disease or condition mediated by human proteases of (13) an isolated human protease described in the invention. The product of the invention can be used in gene therapy or for preparing a composition for treating a disease or condition mediated by a human protease protein e.g. Parkinson's disease. This sequence represents a protesin e.g. Parkinson's disease. This sequence represents a protesin protein associated with the human G-protein coupled receptor (GPCR)
                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel human G-protein coupled receptor, its
                                                                                                                                                                                                                                                                                                            G-protein coupled receptor; secretin receptor subfamily; human, GPCR; protease; Parkinson's disease; receptor.
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New human protease peptides, useful for preparing a composition for treating a disease or condition mediated by human proteases e.g. Parkinson's disease.
                                                                               ö
                                                                                                                                                                                                                                                                                  Human G-protein coupled receptor associated protein SEQ ID 4.
                                                   100.0%; Score 63; DB 4; Length 328; 100.0%; Pred. No. 0.055;
                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Di Francesco V;
                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ketchum KA,
                                                                                                                                                                                                  ABG73644 standard; protein; 513 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure, Fig 2, 84pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAR-2001; 2001US-00818264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-MAR-2001; 2001US-00818264.
                                                                                                                                                                                                                                                        (first entry)
                                           Query Match
Best Local Similarity 100.
Marches 10; Conservative
protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Webster M, Beasley EM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DI FRANCESCO V.
                                                                                                         10
                                                                                                                                 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WEBSTER M.
BEASLEY E M.
KETCHUM K A.
                                                                                                                     WPI; 2003-138646/13.
                                                                                                       1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                              US2002142951-A1.
                         Sequence 328 AA,
                                                                                                                                                                                                                                                        11-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                        03-OCT-2002
                                                                                                                                                                                                                             ABG73644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (WEBS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DFRA/)
                                                                                                                                                                         RESULT 2
SXS
                                                                                                                                 g
                                                                                                                                                                                                               ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method of detecting an ovarian cancerassociated transcript in a cell from a patient, by contacting a biological sample from the patient with a polymucleotide that selectively hybridizes to a sequence at least 80% identical to any of one of 80 nucleic acid sequences given in the specification. The method is useful in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The nucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment, monitoring response to therapy, selecting patients for post-operative chemotherapy or radiation therapy, in selecting mode of therapy, detection of pre-cancerous lesions, and as vaccines. This sequence corresponds to one of the proteins used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a polynucleotide that hybridizes to an ovarian cancer gene.
                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          post-operative chemotherapy, radiation therapy, tumour prognosis, pre-cancerous lesion detection.
                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis;
                                                             Length 513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 63; DB 7; Length 936;
                                                                                                                               0; Indels
                                                             Score 63; DB 6;
Pred. No. 0.089;
                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for the detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ovarian cancer-associated protein #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                ADB80454 standard; protein; 936 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 13; Page 280; 332pp; English.
                                                100.0%; Sco
100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-2001; 2001US-0299234P.
27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-031544P.
13-NOV-2001; 2001US-0350666P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JUN-2002; 2002WO-US019297.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                           379 CWINNNAVFY 388
                                                                                                                                                                                                1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-167431/16.
N-PSDB; ADB80453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mack DH, Gish KC;
Sequence 513 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 936 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2002102235-A2.
```

```
RESULT
요
                                                                                                                                                                                                                                       ð
          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                  Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal neovascularistaion syndrome; scarring; uterine fibroid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to nucleic acids and proteins (ADN18683-ADN40064) whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The
                                                                                                                                                                                                          detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
           Gaps
                                                                                                                                                   Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hevezi PA;
          ö
          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glynne R, Her
E, Zlotnik A;
         ö
Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gish KC, Gly
Wilson KE,
          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12; SEQ ID NO 490; 1385pp; English.
                                                                                           ADN39172 standard; protein; 936 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aziz N, Ginsburg WM,
Murray R, Watson SR,
                                                                                                                                                                                                                                                                                                                                         2001US-0334393P
2001US-03435394P
2002US-0347211P
2002US-0347349P
2002US-0355250P
2002US-0355250P
2002US-0356714P
2002US-0359077P
2002US-0359077P
2002US-0359077P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOTECHNOLOGY INC
100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0386614P.
2002US-0396839P.
2002US-0397775P.
                                                                                                                                                                                                                                                                                                     13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0409450P.
                                                                                                                               17-JUN-2004 (first entry)
         10; Conservative
                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-468649/44.
                            1 CWINNNAVFY
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aziz N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; ADN39171.
                                                                                                                                                                                                                                                                WO2003042661-A2
                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                    03-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                               10-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                        08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-2002;
04-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                              14-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                      08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                       12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EOSB-) EOS
                                                                                                                                                                                                                                                                                    22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Afar D,
Mack DH,
                                                                                                              ADN39172;
         Matches
                            à
                                             g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (RE6) polypeptide and the navention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein-6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polynucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of
invention also relates to expression vettors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, antibodies and methods are useful for disquosing, prognosing and treating cancer and other conditions such as psortasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistation syndromes, scarring and uterine fibroids. They may sequence represents a polypeptide of the invention. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
human epididymis-specific receptor protein-6 delta 24; HE6delta24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human epididymis-specific receptor protein-6 delta 24 (HE6delta24) #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Obermann-Pless H, Samalecos A, Osterhoff C; Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 63; DB 7; Length 936; 100.0%; Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 55; SEQ ID NO 34; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADN88596 standard; protein; 966 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-OCT-2002; 2002US-0419979P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mutant; mutein; receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    748 CWINNNAVEY 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ADN88595.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 936 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN88596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 5
ADN88596
```

4

us-10-668-181-6.rag

Sequence 967 AA;

```
စ္တ
                                                                                                                                             g
                                                                                                              ò
                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a method of detecting an ovarian cancerbasociated transcript in a cell from a patient, by contacting a basociated transcript in a cell from a patient, by contacting a basociated sample from the patient with a polymucleotide that selectively hybridizes to a sequence at least 80% identical to any of one of 80 mucleic acid sequences given in the specification. The method is useful in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The nucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment, monitoring response to therapy, selecting patients for post-operative chemotherapy or radiation therapy, in selecting mode of therapy, and as vaccines. This sequence corresponds to one of the proteins used for the detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a polynucleotide that hybridizes to an ovarian cancer gene.
treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6delta24 mutant polypeptide of the invention.
                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour prognosis; pre-cancerous lesion detection.
                                                                                                                                                                                ö
                                                                                                                                            Score 63; DB 8; Length 966;
Pred. No. 0.18;
                                                                                                                                                                               0; Indels
                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ovarian cancer-associated protein #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 13; Page 279; 332pp; English.
                                                                                                                                                                                                                                                                                                                                       ADB80452 standard; protein; 967 AA.
                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-JUN-2001; 2001US-0299234P.
27-AUG-2001; 2001UG-0315887P.
05-SEP-2001; 2001US-031544P.
13-NOV-2001; 2001US-035666FP.
12-APR-2002; 2002US-0372246F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUN-2002; 2002WO-US019297.
                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003 (first entry)
                                                                                                                         Query Match
Best Local Similarity luv.
Laber 10; Conservative
                                                                                                                                                                                                                                        778 CWINNNAVFY 787
                                                                                                                                                                                                                  1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-167431/16.
N-PSDB; ADB80451.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gish KC;
                                                                                                          Sequence 966 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2002102235-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                           ADB80452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mack DH,
                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                      RESULT 6
ADB80452
 88888888
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                          ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                               fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; inflammatory disease; autoimmune disease; deterinal neovascularistaion syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to nucleic acids and proteins (ADN18683-ADN40064) whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods
                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hevezi PA;
A;
                                                                                                                                                                                                                                                      Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:488.
                                 .
0
                                                                                                                                                                                                                                                                                   Human; differential expression; cancer; angiogenic disorder;
   100.0%; Score 63; DB 7; Length 967; 100.0%; Pred. No. 0.18;
                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glynne R,
E, Zlotnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gish KC, Gl
Wilson KE,
                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 12; SEQ ID NO 488; 1385pp; English.
                                                                                                                                                                  ADN39170 standard; protein; 967 AA.
                                 o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aziz N, Ginsburg WM,
Murray R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JAN-2002; 2002US-0347211P.
10-JAN-2002; 2002US-0347349P.
08-FEB-2002; 2002US-0352SOP.
13-FEB-2002; 2002US-03596714P.
20-FEB-2002; 2002US-0359077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-NOV-2001; 2001US-0332464P.
29-NOV-2001; 2001US-0334393P.
03-DEC-2001; 2001US-0340376P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-NOV-2002; 2002WO-US036810.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-2002; 2002US-0368809P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUN-2002; 2002US-0386614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JUL-2002; 2002US-0396839P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-JUL-2002; 2002US-0397775P.
                                                                                                                                                                                                                         (first entry)
                                10; Conservative
                                                                              728 CWINNNAVFY 737
                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003-468649/44.
Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aziz N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ADN39169
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003042661-A2
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                         17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   о,
Пн,
                                                                                                                                                                                             ADN39170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mack
                                                                                                                                      RESULT 7
                                                                                                                                                 ADN39170
```

```
ô
                 patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides, and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, atterosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to the human epididymis-specific receptor protein-6 (HEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide and the rat epididymis-specific receptor protein-6 (REG) polypeptide and the invention also relates to an antibody or its fragment specific for the HEG, MEG or REG polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein 6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polynucleotide of the invention, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
    cell in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human epididymis-specific receptor protein-6 (HE6) polypeptide #3
                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Osterhoff C;
  determining the presence or absence of a pathological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Samalecos A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 58; SEQ ID NO 37; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADN88599 standard; protein; 979 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Obermann-Pless H,
Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-OCT-2003; 2003WO-EP011662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               737
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          728 CWINNAVEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                               Sequence 967 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; ADN88578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
ADN88599
$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (RE6) polypeptide and the rat epididymis-specific receptor protein-6 (RE6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide with any of the nucleotide sequences encoding an epididymis-specific receptor protein-6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comparishing a polynucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                              treating infertility in a male mammal. The polynucleotides encoding the polypetides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated human, mouse or rat epidådymis-specific receptor protein-6 polypeptide, useful for isolating agent8 used for treating male
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human epididymis-specific receptor protein-6 (HE6) polypeptide #11.
method of diagnosing infertility in a male mammal and a method of
                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                   100.0%; Score 63; DB 8; Length 979; 100.0%; Pred. No. 0.18; o. 18; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C, Obermann-Pless H, Samalecos A, Osterhoff
J, Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polypeptide, useful for isolating agent!
infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 58; SEQ ID NO 45; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN88607 standard; protein; 987 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-OCT-2002; 2002US-0419979P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                   Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740 CWINNNAVFY 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ADN88582.
                                                                                                                                                                            of the invention
                                                                                                                                                                                                                                                   Sequence 979 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kirchhoff C,
Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADN88607;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADN8 8 607

XX A ADN8

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
8888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

Sequence 987 AA;

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of detecting an ovarian cancerassociated transcript in a cell from a patient, by contacting a biological sample from the patient with a polymcleotide that selectively hybridizes to a sequence at least 80% identical to any of one of 80 nucleic acid sequences given in the specification. The method is useful in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The nucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment, monitoring response to therapy, selecting patients for post-operative chemotherapy or radiation therapy, in selecting mode of therapy, and as vaccines. This sequence corresponds to one of the proteins used for the detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a polynucleotide that hybridizes to an ovarian cancer gene.
                                      Gaps
                                                                                                                                                                                                                                                                                                                        cytostatic; gene therapy, vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour prognosis; pre-cancerous lesion detection.
                                    ö
100.0%; Score 63; DB 8; Length 987; 100.0%; Pred. No. 0.18; or Mismatches 0; Indels
                                                                                                                                                                                                                                                                                       Ovarian cancer-associated protein #7.
                                                                                                                                                                                     ADB80450 standard; protein; 993 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 13; Page 278; 332pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-2001, 2001US-0299234P.
27-MUG-2001, 2001US-0315287P.
05-SEP-2001, 2001US-031544P.
13-MOV-2001, 2001US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JUN-2002; 2002WO-US019297.
                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 10; Conservative
                 Best Local Similarity 100.
Matches 10; Conservative
                                                                                       748 CWINNNAVFY 757
                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-167431/16.
N-PSDB; ADB80449.
                                                                    1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gish KC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 993 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                           WO2002102235-A2.
                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-DEC-2002
   Query Match
                                                                                                                                                                                                                      ADB80450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mack DH,
                                                                                                                                                                    ADB80450
                                                                    ð
                                                                                                 g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (NE6) polypeptide and the rat epididymis-specific receptor protein-6 (NE6) polypeptide and the rat epididymis-specific receptor protein-6 (NE6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein 6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polynucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                 Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                          Human epididymis-specific receptor protein-6 (HE6) polypeptide #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 63; DB 8; Length 993;
100.0%; Pred. No. 0.18;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADN88609 standard; protein; 995 AA.
                                                                                                       ADN88601 standard; protein; 993 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Obermann-Pless H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 58; SEQ ID NO 39; 127pp;
                                                                                                                                                                                                                                                                                                                                                                                                                    21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-OCT-2002; 2002US-0419979P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nubbemeyer R;
                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
CWINNNAVFY 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; ADN88579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 993 AA;
                                                                                                                                                                                                                                                                                                                                                  WO2004037860-A1
                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kirchhoff C,
                                                                                                                                                                          29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                    06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gottwald U,
                                                                                                                                        ADN88601;
                     754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN88609
ID ADN8
XX
                                                                                       ADN88601
                     셤
                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

ô

Gaps

. 0

100.0%; Score 63; DB 7; Length 993; 100.0%; Pred. No. 0.18; ive 0; Mismatches 0; Indels

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN39168
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (ME6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polynucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                            Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                               Human epididymis-specific receptor protein-6 (HE6) polypeptide #13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour prognosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                         Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 63; DB 8; Length 995; 100.0%; Pred. No. 0.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 58; SEQ ID NO 47; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ovarian cancer-associated protein #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADB80458 standard; protein; 1000 AA.
                                                                                                                                                                                                                                                                                                                                                                         Obermann-Pless H,
                                                                                                                                                                                                                                                                   21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                      22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                       Nubbemeyer R;
                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        756 CWINNNAVFY 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                    (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ADN88583.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the invention
                                                                                                                                                                                                  WO2004037860-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 995 AA;
                                                                                                                                                                                                                                                                                                                                                                       Kirchhoff C,
                                                                                                                                                                   Homo sapiens.
                               29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                    06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                         Gottwald U,
                                                                                                                                   receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADB80458;
ADN88609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB80458
```

g

ઠે

\$\$\$\$\$\$\$\$\$\$\$

```
Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a polynucleotide that hybridizes to an ovarian cancer gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a method of defecting an ovarian cancerassociated transcript in a cell from a patient, by contacting a biological sample from the patient with a polynuclectide that selectively bybridizes to a sequence at least 80% identical to any of one of 80 mucleic acid sequences given in the specification. The method is useful in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The nucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment monitoring response to therapy, selecting patients for post-operative chemotherapy or radiation therapy, in selecting mode of therapy, determining tumour prognosis, early detection of pre-cancerous lesions, and as vaccines. This sequence corresponds to one of the proteins used for the detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal neovascularistian syndrome; scarring; uterine fibroid; detection; disquosis; prognosis, drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 63; DB 7; Length 1000; 100.0%; Pred. No. 0.18; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN39168 standard; protein; 1000 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 13; Page 282; 332pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; F1.
pre-cancerous lesion detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                             18-JUN-2002; 2002WO-US019297.
                                                                                                                                                                                                                                                                                                                                                                                               27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-0317544P
13-NOV-2001; 2001US-0350666P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   761 CWINNNAVFY 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-167431/16.
N-PSDB; ADB80457.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gish KC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1000 AA;
                                                                                                                                                  WO2002102235-A2.
                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                 18-JUN-2001;
                                                                                                                                                                                                                      27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN39168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mack DH,
```

22-MAY-2003

```
The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (ME6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal and a method of polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                  Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human epididymis-specific receptor protein-6 (HE6) polypeptide #7.
                                                                                                         Human epididymis-specific receptor protein-6 (HE6) polypeptide #9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 63; DB 8; Length 1001; 100.0%; Pred. No. 0.18; o. Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 58; SEQ ID NO 43; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN88603 standard; protein; 1003 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Obermann-Pless H,
                                                                                                                                                                                                                                                                                                                                                          21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                  22-OCT-2002; 2002US-0419979P.
                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                762 CWINNNAVFY 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                       (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
les 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADN88581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1001 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of the invention.
                                                                                                                                                                                                                                                                          WO2004037860-A1
                                                                                                                                                                                                                                 Homo sapiens.
                                                              29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gottwald U,
                                                                                                                                                                                             receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADN88603;
                         ADN88605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADN88603
    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
whose expression is upregulated or downregulated in specific cancers or
contact diseases such as angiogenic or fibratic disorders, and to methods
of determining the presence or absence of a pathological cell in a
coff determining the presence or absence of the invention. The
coff determining the presence or absence of the invention. The
convention also relates to expression vectors and host cells comprising a
concleic acid of the invention; antibodies which specifically bind a
concleic acid of the invention; use of such antibodies for drug targeting;
concleic and methods are useful for diagnosing, prognosing and treating
cancer and other conditions such as psoriasis, ischaemia, heart disease,
atherosclerosis, inflammatory diseases, autoimmune diseases, retinal
concascularistation syndromes, scarring and uterine fibroids. They may
concer expressors a polypeptide of the invention. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hevezi PA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 63; DB 7; Length 1000; 100.0%; Pred. No. 0.18; 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gish KC, Glynne R, Her
Wilson KE, Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 12; SEQ ID NO 486; 1385pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aziz N, Ginsburg WM,
Murray R, Watson SR,
                                                                                                                                                                                  2001US-0332464P.
2001US-0334393P.
2001US-0343394P.
2001US-0347211P.
2002US-0347211P.
2002US-0355250P.
2002US-035514P.
2002US-0355714P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EOSB-) EOS BIOTECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0397775P.
                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0372246P
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0396839P
                                                                                                                        13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                              2002US-0370110P
                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0386614P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0409450P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-468649/44.
N-PSDB; ADN39167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ||||||||||
761 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1000 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aziz N,
                                        WO2003042661-A2.
                                                                                                                                                                                                                                                                                                                                13-FEB-2002;
Homo sapiens
                                                                                                                                                                                                                                                14-DEC-2001;
                                                                                                                                                                                                                                                                                         10-JAN-2002;
                                                                                                                                                                                                                                                                                                               08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2002;
                                                                                                                                                                                                                                                                      08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                     20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                             29-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2002;
                                                                                                                                                                                                                               33-DEC-2001;
```

Afar D, 1 Mack DH,

ö

Gaps

; 0

Human epididymis-specific receptor protein-6; HE6;

ADN88605 standard; protein; 1001 AA.

RESULT 15 ADN88605 ID ADN88

Query Match

à 임

```
RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABJ38840
 셤
                                                                                                                                                                                                                                                                                                                                                       The invention relates to the human epididymis-specific receptor protein-6 (HEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide and the rat epididymis-specific receptor protein-6 (REG) polypeptide. The invention also relates to an antibody or its fragment specific for the HEG, MEG or REG polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences ancoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HEG polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                             Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypotensive; antigout, cytostatic; antificial control of the cardiant; neurotransmitter; neuroprotective; antiparkinsonian; cerebroprotective; neuroleptic; tranquiliser; antiarthritic; reproductive; signal transduction activator; bone disease; hypertension; renal failure; heart failure; hyperthyroidism; hyperparathyroidism; carcinoma; sarcoidosis; pancreatitis; stress; high blood pressure; immune depression; periodoral disease; neurodegenerative disease; multiple sclerosis, Alzheimer's disease; Parkinson's disease;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; HE6 receptor; zsig56; seven transmembrane domain receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 63; DB 8; Length 1003; 100.0%; Pred. No. 0.18;
                                                                                                                                                                                                  Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                   Claim 58; SEQ ID NO 41; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB01247 standard; protein; 1013 AA.
                                                                                                                                                                                                Obermann-Pless H,
                                                                                                                   21-OCT-2003; 2003WO-EP011662.
                                                                                                                                             22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                             Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CWINNNAVFY 10
                                                                                                                                                                                                                                         WPI; 2004-357427/33.
                                                                                                                                                                      (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human HE6 receptor.
                                                                                                                                                                                                                                                     N-PSDB; ADN88580.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1003 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the invention.
                                                              WO2004037860-A1
                                                                                                                                                                                                Kirchhoff C,
                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-2000
                                                                                                                                                                                                              Gottwald U,
                                                                                        06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB01247;
             receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB01247
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
```

```
The present sequence is the human HEG receptor, which shows homology to a seven transmembrane domain receptor designated zsig56. The full length nucleic designed by the full length and length seven transmembrane domain receptor designated zsig56. The full length conjugated to the full series of disorders and/or antagonists may be used to treat a wide range of disorders including certain boic disease, hyperthyroidism, hyperparathyroidism, certain carcinomas, sarcoidosis and pancreatitis. They can be used to treat disorders associated with changes in ion or electrolyte homeograsis, and stress induced disorders such as high blood pressure, heart failure, immune depression and periodontal disease. They may be used to treat neurodegenerative disease, including multiple sclerosis, Alzheimer's disease and Parkinson's disease, including continuing damage due to strokes and brain and spinal injuries. Inflammatory disorders such as rheumatoid arthritis can also be treated. zsig56 is expressed in tissues associated with reproduction, i.e. the testis, prostate and placenta, and may be used to treat male fertility by stimulating spermatogenesis and to regulate gestation and birth. zsig56 may be useful as a marker or therapeutic agent in the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Neuroprotective; antiinflammatory; immunosuppressive; cytostatic; neural; nephrotropic; cardiant; human G-protein receptor; HGRBMY28; HGRBMY29; HGRBMY29v; HGRBMY29v; HGRBMY29v; pulmone disorder; pulmonary; inflammatory; haematopoletic; gastrointestinal; small intestine; cancer; proliferative; aberrant p27 regulation; FEN1; cell cycle; DNA repair;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel G-protein coupled receptor zsig56 useful for treating hypertension, hyper and hypothyroidism, inflammation, gout, carcinoma, pancreatitis, Alzheimer's disease and Parkinson's disease, renal and heart failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
schizophrenia; manic depression; stroke; rheumatoid arthritis; male fertility; spermatogenesis stimulation; pregnancy regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 63; DB 3; Length 1013; 100.0%; Pred. No., 0.19; 0; Indels (ive 0, Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human G-protein coupled receptor HE6 protein SEQ ID 139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABJ38840 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 1; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-00208691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ellsworth JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.v.
action 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            774 CWINNNAVFY 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-442164/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1013 AA;
                                                                            prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    prostate cancer
                                                                                                                                                                                                                                        WO200034473-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sheppard PO,
                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                         15-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABJ38840;
```

```
This invention relates to an isolated nucleic acid molecule comprising a polynucleotide encoding a human G-protein receptor, including HGRBMY28, 16RBMY29, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human epididymis-specific G-protein coupled receptor 64 protein SEQ ID 4.
  apoptosis; spleen; lymph node; reproductive; oesophageal; metabolic; endocrine; colon; cervix; lung; squamous cell; renal; cardiovascular; placental; testis; heart; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 variants, useful for treating, preventing or ameliorating e.g. hematopoietic, neural, pulmonary, gastrointestinal, inflammatory or proliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New G-protein coupled receptors, HGRBMY28 and HGRBMY29, and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 63; DB 6; Length 1014; 100.0%; Pred. No. 0.19; cive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hawken DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ramanathan C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABJ38832 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure, Fig 13; 501pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                           (BRIM ) BRISTOL-MYERS SQUIBB CO
                                                                                                                                                                                                                                                                                                11-APR-2001; 2001US-0283145P.
11-APR-2001; 2001US-0283161P.
03-MAY-2001; 2001US-0288468P.
25-UUN-2001; 2001US-0300619P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Feder J, Mintier G,
                                                                                                                                                                                                                                                 11-APR-2002; 2002WO-US011525.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-075538/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1014 AA;
                                                                                                                                                 WO200283856-A2
                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-2003
                                                                                                                                                                                                24-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABJ38832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bol D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABJ38832
BXXXXXB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
```

```
This invention relates to an isolated nucleic acid molecule comprising a polynucleotide encoding a human G-protein receptor, including HGRBMY28, HGRBMY29, DAT HGRBMY29, 2 polypetides. The HGRBMY28 or HGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating.

CHGRBMY29 polypeptides and nucleic acids are useful for treating the thirty accoupled receptors are either directly or influence a pulmonary acidsorder, a gastrointestinal disorder, a disorder adisorder related to aberrant p27 regulation, a disorder related to aberrant cell cycle regulation, a disorder related to aberrant componence and a disorder related to aberrant componence and a disorder of the spleen, a disorder of the lymph componence and endormine disorder and endormine disorder a proliferative disorder afflicting the colon, cervix, lung, squamous cells or tissues, a renal disorder, a cardiovascular disorder, a proliferative disorder afflicting the colon, cervix, lung, squamous cells or tissues, a renal disorder, a cardiovascular disorder, a placental disorder, and a disorder colon cervix, lung, squamous cells or tissues, a renal disorder, a cardiovascular disorder, a placental disorder, and a cincertion may be used to treat disorders by gane therapy. This sequence construction may be used to treat disorder related polynucleotides of the represents a Human G-protein coupled receptor related protein of the construction may be used to treat disorder related protein of the testes, heart or lymph nodes. The isolated polynucleotides of the represents a Human G-protein coupled receptor related protein of the testes or the disorder related to the testes or the disorder related to the disorder related to the disorder rela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                     Neuroprotective; antiinflammatory; immunosuppressive; cytostatic; neural; nephrotrogic; cardiant; human G-protein receptor; HGRBMY28; HGRBMY29; HGRBMY29; HGRBMY29; inflamme disorder; pulmonary; inflammatory; haematopoietic; gastrointestinal; small intestine; cancer; proliferative; aberrant p27 regulation; FEN1; cell cycle; DNA repair; proliferative; special; splean; lymph node; reproductive; ossophageal; metabolic; endocrine; colon; cervix; lung; squamous cell; renal; cardiovascular; placental; testis; heart; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New G-protein coupled receptors, HGRBMY28 and HGRBMY29, and their variants, useful for treating, preventing or ameliorating e.g. hematopoletic, neural, pulmonary, gastrointestinal, inflammatory optoliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Length 1014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hawken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 63; DB 6; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bol D, Feder J, Mintier G, Ramanathan C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure, Fig 2; 501pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BRIM ) BRISTOL-MYERS SQUIBB CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-APR-2001; 2001US-0283145P.
11-APR-2001; 2001US-02831G1P.
03-MAY-2001; 2001US-0288468P.
25-JUN-2001; 2001US-0306619P.
                                                                                                                                                                                                                                                                                                                                                                                                                       11-APR-2002; 2002WO-US011525.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-075538/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                  WO200283856-A2.
                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                      24-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ABP81971 standard; protein; 1014 AA.

RESULT 20

ABP81971

ü

Gaps

```
Disclosure, Fig 1; 523pp; English
                                                                                                         (LIFE-) LIFESPAN BIOSCIENCES INC.
                                                                                           19-DEC-2001; 2001WO-US050107.
                                                                                                  19-DEC-2000; 2000US-0257144P.
          04-MAR-2003 (first entry)
                                                                                                                 Burmer GC, Roush CL,
                                                                                                                        WPI; 2003-046718/04.
                                                                                                                                               autoimmune diseases.
                                                                                                                                                                                                                                                            Sequence 1014 AA;
                                                                                                                           N-PSDB; ABZ42819
                                                                            WO200261087-A2.
                                                                     Homo sapiens.
                                                                                   08-AUG-2002
   ABP81971;
                                                              ulcer.
```

Brown JP;

```
The invention relates to a novel isolated polynucleotide comprising e.g. a sequence encoding a secretin-type G-protein coupled receptor (GPCR) (latrophilin) polypeptide. A protein of the invention has cytostatic, cardiant, anorectic, antidiabetic, and neuroprotective activity. The polynucleotide may have a use in gene therapy. The expression vector is useful for preparing a medicament for modulating the activity of secretin-type GPCR (latrophilin) polypeptide in a disease, e.g., central nervous system, haematological, genitourological or cardiovascular disease, obesity, diabetes or cancer. The present sequence represents a secretin-type GPCR (latrophilin) polypeptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated polynucleotide, useful for preparing a medicament for modulating the activity of secretin-typė GPCR (latrophilin) polypeptide in a disease, e.g., cardiovascular disease, obesity, diabetes or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GPCR; secretin-type G-protein coupled réceptor; latrophilin; cardiant; G-protein coupled receptor; cytostatic; anotectic; antidiabetic; neuroprotective; gene therapy; central neuroprotective; gene therapy; central nervous system; haematological; genitourological; obesity; diabetes; ancer; human.
      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secretin-like G-protein coupled rèceptor (latrophilin #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 63; DB 6; Length 1014; 100.0%; Pred. No. 0.19; cive 0; Mismatches 0; Indels (
Indels
   ..
0
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 155-158; 161pp; English
                                                                                                                                                                                                                                                              ABR61472 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB80456 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Pre-
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-DEC-2002; 2002WO-EP014572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-DEC-2001; 2001US-0340825P. 30-AUG-2002; 2002US-0406984P.
                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       784
                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-514042/48.
                                                                                                              775 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003051925-A1.
                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koehler RH;
                                                                                                                                                                                                                                                                                                                        ABR61472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADB80456;
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                       RESULT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 22
                                                                                                                                                                                                                                   ABR61472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB80456
                                                          ò
                                                                                                              유
                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes antigenic peptides (I) comprising: (a) any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino acids. Also described: (1) an assay for the detection of a particular G protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or a particular GPCR. (I) can be used as GPCR modulators and in gene therapy. The antigenic peptides for GPCRs are useful in detecting an antibody against a particular GPCR., and in the production of specific antibodies. The peptides for GPCRs are also useful for detecting the presence of corresponding GPCRs. The antigenic peptides for GPCRs and antibodies are useful for diagnosing and designing drugs for treating immune-related diseases, growth-related diseases, call creating immune-related diseases, growth-related diseases, call seases, or autoimmune diseases, immunological-related cell proliferative diseases, or autoimmune diseases, and or viral infections.
                                                                                                                                                                                 G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; cell regeneration-related disease; AIDS; cancer; immunological-related cell proliferative disease; autoimmune disease; Alzheimer's disease; atheroselerosis; infection; osteoarchritis; allergy; osteoaporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes; graft versus host disease; Parkinson's disease; multiple sclerosis; pain; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea; hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          * isolated antigenic peptides e.g., for G protein-coupled receptors PCR), useful for diagnosing and designing drugs for treating conditions which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute inflammation, allergies, Crohn's disease, diabetes, graft versus host disease, Parkinson's disease, multiple sclerosis, pain, psoriasis, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension, hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be used in immunoassays and immunodiagnosis. ABZ42523 to ABZ42869 encode GPCR proteins given in ABP81675 to ABP82018, which are used in the exemplification of the present invention
                                                                                                                             Human G protein-coupled receptor GPR64 protein SEQ ID NO:428.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 63; DB 6; Length 1014;
Pred. No. 0.19;
```

ö

Gaps

100.0%;

Query Match Best Local Similarity

```
inflammatory disease; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Afar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mack
         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a method of detecting an ovarian cancerassociated transcript in a cell from a patient, by contacting a basociated transcript in a cell from a patient, by contacting a blological sample from the patient with a polymucleotide that selectively hybridizes to a sequence at least 80% identical to any of one of 80 nucleic acid sequences given in the specification. The method is useful in diagnosing ovarian cancer and in identifying and using agents and/or targets that inhibit ovarian cancer. The nucleic acid molecule, polypeptide and the antibody may also be used in detecting ovarian cancers, monitoring and early detection of relapse following treatment, anonitoring response to therapy, in selecting mode of therapy, determining tumour prognosis, early detection of pre-cancerous lesions, and as vaccines. This sequence corresponds to one of the proteins used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient with a polynucleotide that hybridizes to an ovarian cancer gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, differential expression, cancer, angiogenic disorder, fibrotic disorder, psoriasis, ischaemia, heart disease, atherosclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                    cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour prognosis; pre-cancerous lesion detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 63; DB 7; Length 1014; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the detection method of the invention.
                                           Ovarian cancer-associated protein #10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADN39174 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 13; Page 281; 332pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-0317544P.
13-NOV-2001; 2001US-0350666P.
                                                                                                                                                                                                                                                                                                                                                      .8-JUN-2001; 2001US-0299234P
                                                                                                                                                                                                                                                                                                           18-JUN-2002; 2002WO-US019297
                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2002; 2002US-0372246P
04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003-167431/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gish KC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADB80455
                                                                                                                                                                                                                    WO2002102235-A2.
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                  27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mack DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN39174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN3917
  NAME OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
```

```
The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
whose expression is upregulated or downregulated in specific cancers or
other diseases such as angiogenic or fibrotic disorders, and to methods
of determining the presence or absence of a pathological cell in a
patient by detecting a nucleic acid at least 80% identical to those of
the invention or by detecting a polypeptide of the invention. The
cinvention also relates to expression vectors and host cells comprising a
pulpapide of the invention; antibodies which specifically bind a
polypeptide of the invention; use of such antibodies for drug targeting;
and methods of screening for modularors of activity or expression of the
polypeptides and nucleic acids. The nucleic acids, polypeptides,
antibodies and methods are useful for diagnosing, prognosing and treating
cancer and other conditions such as psoriasis, ischaemia, heart disease,
atherosclerosis, inflammatory diseases, autoimmune diseases, retinal
neovascularistation syndromes, scarring and uterine fibroids. They may
also be useful in wound healing and in contraception. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
retinal neovascularistaion syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gish KC, Glynne R, Hevezi PA;
Wilson KE, Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 63; DB 7; Length 1014; 100.0%; Pred. No. 0.19; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 12; SEQ ID NO 492; 1385pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aziz N, Ginsburg WM,
Murray R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                         13-NOV-2002; 2002WO-US036810.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-NOV-2001; 2001US-0332464P.
29-NOV-2001; 2001US-0334393P.
03-DEC-2001; 2001US-0335394P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001US-0340376P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0347211P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0347349P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0355250P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0356714P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2002; 2002US-0359077P.
29-MAR-2002; 2002US-0368809P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-APR-2002; 2002US-0370110P.
12-APR-2002; 2002US-0372246P.
05-JUN-2002; 2002US-0386614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUL-2002; 2002US-0396839P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0397775P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JUL-2002; 2002US-0397845P. 09-SEP-2002; 2002US-0409450P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003-468649/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aziz N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ADN39173
                                                                                                                                                                                                                                      WO2003042661-A2
                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-FEB-2002;
                                                                                                                                                                                                                                                                                                     22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ο,
υπ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

1 CWINNNAVFY 10

775 CWINNNAVFY 784

셤

```
The invention relates to nucleic acids and proteins (ADN)38683-ADN40064) whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; use of such antibodies for drug targeting; and methods of screening for medulators of activity or expression of the polypeptides and nucleic acids. The nucleic acids, polypeptides,
                                                                                                                                                   Human; differential expression; cancer; angiogenic disorder;
fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis;
inflammacry disease; autoimmune disease;
                                                                                                                                                                                                  retinal neovascularistaton syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory;
                                                                                                                        Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:Al29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Determining the presence or absence of a pathological cell in a useful for diagnosing, prognosing or treating cancer, comprises a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hevezi PA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gish KC, Glynne R, He Wilson KE, Zlotník A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 12; SEQ ID NO A129; 1385pp; English.
                             ADN39529 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                   vulnerary; gene therapy; vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ginsburg WM, R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001US - 0335394P
2001US - 0340376P
2002US - 0347211P
2002US - 0347349P
2002US - 0355250P
2002US - 0355714P
2002US - 0356099P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                          2001US-0332464P.
2001US-0334393P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002US-0372246P.
2002US-0386614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0396839P.
2002US-0397775P.
2002US-0397845P.
                                                                                                                                                                                                                                                                                                                                                                             13-NOV-2002; 2002WO-US036810
                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murray R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-468649/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; ADN39528.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aziz N,
                                                                                                                                                                                                                                                                                                               WO2003042661-A2.
                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                           13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                          21-NOV-2001;
29-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-FEB-2002;
20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-APR-2002;
                                                                                         17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-SEP-2002
                                                                                                                                                                                                                                                                                                                                              22-MAY-2003
                                                            ADN39529;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Afar D,
Mack DH,
RESULT 24
                 ADN3952
```

```
ö
antibodies and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may also be useful in wound healing and in contraception. The present sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting
                                                                                                                                                                                                                                                                                                                                                                                                            Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; isofheemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal neovascularistaion syndrome; scarring; uterine fibroid; defection; diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                 Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:A92.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hevezi PA;
A;
                                                                                                                                                              ö
                                                                                                                                 100.0%; Score 63; DB 7; Length 1014; 100.0%; Pred. No. 0.19;
                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glynne R,
S, Zlotnik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gish KC, Gly
Wilson KE,
                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                             ADN39492 standard; protein; 1014 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aziz N, Ginsburg WM,
Murray R, Watson SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EOSB-) EOS BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-DEC-2001; 2001US-0340376P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-FEB-2002; 2002US-0355250P.
13-FEB-2002; 2002US-0356714P.
20-FEB-2002; 2002US-0359077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2002; 2002US-0370110P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-NOV-2002; 2002WO-US036810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-NOV-2001; 2001US-0350666P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-NOV-2001; 2001US-0332464P.
29-NOV-2001; 2001US-0334393P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-DEC-2001; 2001US-0335394P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0347349P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAR-2002; 2002US-0368809P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-2002; 2002US-0386614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-JUL-2002; 2002US-0396839P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0397775P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0397845P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-SEP-2002; 2002US-0409450P
                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                             Local Similarity 100.
es 10; Conservative
                                                                                                                                                                                                          775 CWINNNAVFY 784
                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-468649/44.
                                                                                                                                                                                          1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aziz N,
                                                                                                    Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; ADN39491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003042661-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                      17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ο,
Hi,
                                                                                                                                                                                                                                                                                                                          ADN39492;
                                                                                                                                 Query Match
                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Afar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mack
                                                                                                                                                                                                                                                                  RESULT 25
                                                                                                                                                                                                                                                                                 ADN39492
 8888888
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              patient,
detecting
```

```
AD029079;
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AD029079
    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                  The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
whose expression is upregulated or downregulated in specific cancers or
other diseases such as angiogenic or fibrotic disorders, and to methods
of determining the presence or absence of a pathological cell in a
patient by detecting a nucleic acid at least 80% identical to those of
the invention or by detecting a polypeptide of the invention. The
invention also relates to expression vectors and host cells comprising
nucleic acid of the invention; antibodies which specifically bind a
polypeptide of the invention; use of such antibodies for drug targeting;
and methods of screening for modulators of activity or expression of the
polypeptides and nucleic acids. The nucleic acids, polypeptides,
antibodies and methods are useful for diagnosing, prognosing and treating
cancer and other conditions such as psoriasis, ischaemia, heart disease,
atherosclerosis, inflammatory diseases, autoimmune diseases, retinal
neovascularisation syndromes, scarring and uterine fibroids. They may
also be useful in wound healing and in contraception. The present
sequence represents a polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GPCR; G-protein coupled receptor; neuroprotective; nootropic; tranquiliser; antimigraine; neuroleptic; antimanic; antidepressant; antiorvulsant; antiparkinsonian; cytostatic; cardiant; hypotensive; anticorvulsant; antiparkinsonian; cytostatic; cardiant; hypotensive; antianginal; analgesic; anorectic; anti-HIV; antiasthmatic; osteopathic; uropathic; antiulcer; antiallergic; cell cycle regulation; neurological; severe mental retardation; dyskinesia; brain; spinal cord; affective; neoplastic; cardiovascular; immunological; immune; endocrinal; growth; carcing; HIV infection; cancer; metabolic; pituitary; chromosome identification; gene therapy; human; receptor; HEG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid molecule encoding a human G-protein coupled receptor, useful for diagnosing, preventing or treating diseases involving the receptor, e.g. Parkinson's disease, dementia, asthma, hypertension or
                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                            100.0%; Score 63; DB 7; Length 1014; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human GPCR HE6 (GPCR 64, epididymis-specific) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gopal S, Mintier G, Feder JN;
                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                            Claim 12; SEQ ID NO A92; 1385pp; English.
nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADP03579 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BRIM ) BRISTOL-MYERS SQUIBB CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JAN-2003; 2003WO-US001911.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JAN-2002; 2002US-0350724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100...
                                                                                                                                                                                                                                                                                                                                                                                                                      775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-618283/58.
                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                 Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003062393-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ramanathan CS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADP03579;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADP03579
g
```

```
The invention relates to a novel isolated GPCR (G-protein coupled receptor) nucleic acid molecule. The polynucleotide and polypeptide of the invention demonstrate neuroprotective, nootropic, tranquiliser, antimigraine, neuroleptic, antimanic, antidepressant, anticonvulsant, antimigraine, neuroleptic, antimanic, antidepressant, anticonvulsant, antiparkinsonian, cytostatic, cardiant, hypotensive, antianginal, analgesic, anoractic, anti-HIV, antiasthmatic, osteopathic, uropathic, antiparkinsonian, cytostatic, properties. The nucleic acid molecule and polypeptide of the invention may be useful in diagnosing, preventing, treating or ameliorating a medical condition, such as a disorder related to aberrant coll cycle regulation, neurological disorders, severe mental retardation and dyskinesias, brain disorders, spinal cord disorders, affective disorders, neoplastic disorders, spinal cord disorders, immunological disorders, endocrinal diseases, growth disorders, eating disorders, run infection, cancers, metabolic disorders and pituitary disorders. Furthermore, the polynucleotide may be used in chromosome identification, in identifying organisms from minute courrent sequence is that of a human GPCR (G-protein coupled receptor) current sequence is that of a human GPCR (G-protein coupled receptor)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The protein-coupled receptor; GPCR; drug screening; diagnosis; transgenic mouse; neurological disorder; adrenal gland disorder; cardiovascular disorder; colon disorder; intestinal disorder; cardiovascular disorder; blood disorder; immune disorder; bone disorder; protein disorder; cancer; colon disorder; blood disorder; immune disorder; cancer; colon disorder; liver disorder; netabolic disorder; nutritive disorder; cancer; cancer; colon disorder; prostate disorder; testis disorder; skin disorder; stomach disorder; prostate disorder; spleen disorder; skin disorder; thyroid disorder; antiparkinsonian; antimanic; colostatic; anticidabetic; colostatic; anticidabetic; colostatic; antibacterial; antimanic; colostatic; antibacterial; antimalestic; anticidabetic; colostatics; antibacterial; antimalestic; anticidabetic; colostatics; antibacterial; antimalestic; colostatics; antibacterial; cantinalestic; colostatics; colostatics; cancedic; colostatics; colostatics; cancedic; colostatics; colostatics; cancedic; colostatics; cancedic; colostatics; cancedic; cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 63; DB 7; Length 1014; 100.0%; Pred. No. 0.19; ive 0; Mismatches 0; Indels (
Example 1; SEQ ID NO 24; 224pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human novel GPCR GPR64, SEQ ID NO:178.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AD029079 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-2003; 2003WO-US028226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2002; 2002US-0409303P. 09-APR-2003; 2003US-0461329P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004040000-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAY-2004.
```

(PROT-) PROTEIN DESIGN LABS INC.

26-NOV-2002; 2002US-0429739P.

26-NOV-2003; 2003WO-US038193

10-JUN-2004.

```
The invention relates to human and mouse G protein-coupled receptors (GPCRs) and nucleic acids encoding them. The invention also relates to sequences at least 93% identical to the GPCR proteins and nucleic acids of the invention; methods of treating, preventing or diagnosing diseases of the invention; methods of screening for associated with GPCRs of the invention; methods of screening for compounds useful in the treatment of GPCR-related diseases; a transgenic compounds useful in the treatment of GPCR-related diseases; a transgenic computation in a GPCR gene of the invention; a mouse comprising a GPCR gene of the invention and kits comprising to GPCR gene of the invention and kits comprising of the invention in a different GPCR gene of the invention and kits comprising of GPCR used in the GPCR polyceptides and vectors comprising a GPCR used in the GPCR polyceptides of the invention in the diagnosis, treatment or prevention of a wide variety of diseases including neurological disorders (e.g., Alzheimer's disease, comprising a GPCR used in the diagnosis, treatment or prevention of a wide variety of disorders of the adrenal gland; disorders (e.g., Alzheimer's disease, distributed, comprision, dispection or intestina or leukaemial infarction); muscular disorders (e.g., autoimmune disorders (e.g., angina, cardiac arrhythmia or myocardial infarction); muscular disorders (e.g., autoimmune disorders (e.g., angene); bone and joint disorders (e.g., osteoarthritis, gout or osteoporosis); method, plances, plance or putrated coefficiency-related diseases or vitamin deficiency-related diseases or vitamin deficiency-related diseases); and disorders of the kidney, liver, lung, breast, ovary, cuerus, prosterte, testies, skin, stomach, pancess, paperent and gorder or christoperent and cuerus, those sequences not shown were obtained in colorers of the present sequence expresents and control or the protein and disorders or the full sequence data for this patent did not form particle or the protein and disorders or the full sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Boft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                       Novel mammalian G protein coupled receptors, useful for identifying compounds that modulates diagnosing and treating disease condition associated with GPCR dysfunction e.g. autoimmune diseases, angina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 63; DB 8; Length 1014; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human soft tissue sarcoma-upregulated protein - SEQ ID 2455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                             Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J,
Madisen L, Mcilwain KL, Pavlova MN, Vassilatis D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 178; 542pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADQ19636 standard; protein; 1014 AA.
                                                                                                                                                                                                                                                                   pectoris, Parkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINÎNAVFY 10
                                                                                                                   WPI; 2004-390329/36.
N-PSDB; ADO29771.
(PRIM-) PRIMAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004048938-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADQ19636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 775
  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EXSXEX EXTX SXX
```

```
ö
                                                                                                                                                                                                                                                                                                                                          The invention relates to a novel method for detecting soft tissue sarcoma which comprises obtaining a first soft tissue sample from an individual and a normal soft tissue sample from the same or different individual, determining the expression of a gene in both samples and comparing the expression of the gene in both samples, where a higher level protein expression in the first soft tissue sample indicates the presence of soft tissue sample indicates the presence of soft tissue sarcoma. The method of the invention has extroma, possibly via gene therapy or vaccine production. The nucleic and sequences may be useful for detecting soft tissue sarcoma, possibly via gene therapy or vaccine production. The nucleic and sequence may be useful in diagnostic and screening applications. The current sequence is that of a human soft tissue barcoma-upregulated protein of the invention. The current sequence is not shown within the specification per se but was submitted in CD format by the inventor.
                                                                                                                                                                                                                        Early detection of soft tissue sarcoma comprises determining expression of a gene in a first soft tissue sample and a normal soft tissue sample and comparing the gene expression, also useful in treating soft tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; G protein coupled receptor; GPR64; cytotoxic; ovarian cancer; uterine cancer; Ewing's sarcoma; cell death; cytostatic; gene therapy; immunotherapy; cellular proliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 63; DB 8; Length 1014;
100.0%; Pred. No. 0.19;
iive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human G protein coupled receptor GPR64 DNA SeqID 2.
                                                                                                                                                                                                                                                                                                               Example 2; SEQ ID NO 2455; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dubridge R, Bhaskar V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADQ09616 standard; protein; 1014 AA.
                                                                                                                                                      Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PROT-) PROTEIN DESIGN LABS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-DEC-2003; 2003WO-US040820.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-DEC-2002; 2002US-0435618P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         775 CWINNNAVFY 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CWINNNAVFY 10
                                                                                                                                                      Ginsburg WM,
                                                                                                                                                                                       WPI; 2004-441208/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1014 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang Q,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004058171-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADQ09616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                      Aziz N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Law D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
ઠ
```

Gaps

ö

```
The invention relates to the human epididymis-specific receptor protein-6 (HEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide and the rat epididymis-specific receptor protein-6 (REG) polypeptide and the invention also relates to an antibody or its fragment specific for the HEG, MEG or REG polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal and a method of polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HEG polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (RE6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human epididymis-specific receptor protein-6 delta 24 (HE6delta24) #2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertifity; contrace;
human epididymis-specific receptor protein-6 delta 24; HE6delta24;
                                                                                                                                                                                                                                                                                                                               8; Length 1017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Obermann-Pless H, Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                          Claim 55; SEQ ID NO 35; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADN88597 standard; protein; 1020 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mutant; mutein; receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                          778 CWINNNAVFY 787
                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                          of the invention.
                                                                                                                                                                                                                                                                                            Sequence 1017 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADN88595.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004037860-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADN88597;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADN88597
       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                        This invention relates to novel antibodies that bind to the G protein coupled receptor protein identified as GPR64, namely GPR64-1, GPR64-16, GPR64-18, GPR64 anti-GPR64 antibodies as selective cytotoxic agents against GPR64 expressing tumour cells such as those associated with ovarian cancer, uterine cancer and Ewing's sarcoma. The present invention describes epitope mapping of those antibodies that show high affinity binding to GPR64 through competitive binding analyses, such that the antibodies can be assessed for GPR64 dependent cell death in vitro. Accordingly, they can be used to develop cytostatic compositions for gene therapy or immunotherapy that inhibit cellular proliferation of an ovarian cancerous cell and furthermore can diagnose and inhibit growth of tumour cells.
                                                     New antibody that inhibits binding of a GPR64 polypeptide to an antibody comprising GPR64-18, GPR64-81, GPR64-93 or GPR64-101, useful in preparing a composition for diagnosing or treating ovarian cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human epididymis-specific receptor protein-6 (HE6) polypeptide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 63; DB 8; Length 1014; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Samalecos A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 30; 127pp; English
                                                                                                                            Claim 31; SEQ ID NO 2; 75pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN88592 standard; protein; 1017 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Obermann-Pless H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-OCT-2003; 2003WO-EP011662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 775 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1014 AA;
                    N-PSDB; ADQ09615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ADN88584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004037860-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                    invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN88592;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN88592
   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
```

contraceptive;

us-10-668-181-6.rag

of the invention.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to the human epididymis-specific receptor protein-6 (HEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide and the rat epididymis-specific receptor protein-6 (MEG) polypeptide. The invention also relates to an antibody or its fragment specific for the HEG, MEG or REG polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising an polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal. The polynucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HEG polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
  nucleotide sequences encoding an epididymis-specific receptor protein
              6 of the invention, a pharmaceus an opposition presting a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal and a method of polypeptides are useful for isolating an agent that modulates expression a rativity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6delta24 mutant polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human epididymis-specific receptor protein-6 (HE6) polypeptide #2.
                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                 Score 63; DB 8; Length 1020;
Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 58; SEQ ID NO 36; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADN88598 standard; protein; 1033 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Obermann-Pless H,
Nubbemeyer R;
                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-OCT-2003; 2003WO-EP011662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                   ||||||||||
832 CWINNNAVFY 841
                                                                                                                                                                                                                                                                                                               1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-357427/33.
N-PSDB; ADN88578.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SCHD ) SCHERING AG
                                                                                                                                                                                               Sequence 1020 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kirchhoff C,
Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADN88598;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor.
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 32
                                                                                                                                                                                                                                                                                                                                                                                                                               ADN88598
8888888888888
                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA encoding epididymis-specific receptor protein - useful for developing male infertility or contraceptive treatments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents a novel epididymis-specific receptor protein which is a transmembrane protein associated with the epididymis epithelium and is closely connected with sperm maturation. The protein or its derivative or fragments may be useful for detecting autoantibodies in the serum of infertile men and for developing ligands specific for the receptor, e.g. agoniets that may be useful for antagonists that may be useful for treating male infertility or antagonists that may be useful for contraception. The antibodies can be used to detect the receptor in vivo. Oligonucleotides derived from the DNA sequences can be
                                                                                                                                                                                                                                                                                                          Epididymis-specific receptor protein; transmembrane protein; sperm maturation; male infertility; agonist; antagonist; contraception; autoantibody; diagnostic; detection; human.
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 63; DB 2; Length 1038; ilarity 100.0%; Pred. No. 0.19; Conservative 0; Mismatches 0; Indels (
                           DB 8; Length 1033;
                           100.0%; Score 63; DB 8; L
100.0%; Pred. No. 0.19;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "partial protein sequence"
                                                                                                                                                                                                                                                                              Human epididymis-specific receptor protéin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IHFH-) IHF INST HORMON & FORTPFLANZUNGS.
                                                                                                                                                                                      AAW36903 standard; protein; 1038 AA.
                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 19-22; 33pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96DE-01017940.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96DE-01017940.
                                                                                                                                                                                                                                                  11-MAY-1998 (first entry)
                                       Local Similarity 100.
nes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used as diagnostic probes
                                                                                                                                                                                                                                                                                                                                                                                                                 .1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               799 CWINNNAVFY 808
                                                                                                                794 CWINNNAVFY 803
                                                                                    1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ivell R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-527841/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
nes 10; Conserv
Sequence 1033 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1038 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAT97955
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DE19617940-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osterhoff C,
                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-0CT-1997,
                                                                                                                                                                                                                     AAW36903;
                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                           RESULT 33
                                                                                                                                                                          AAW36903
                                                                                                                                                                                                       ò
                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
(HEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide, the mouse epididymis-specific receptor protein-6 (MEG) polypeptide. The invention also relates to an antibody or its fragment specific for the HEG. MEG or NEG polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein-6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal. The polymucleotides encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HEG polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention relates to the human epididymis-specific receptor protein-6
                                                                                            Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human epididymis-specific receptor protein-6 (HE6) polypeptide #12.
                                              Human epididymis-specific receptor protein-6 (HE6) polypeptide #4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 63; DB 8; Length 1047; 100.0%; Pred. No. 0.19; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Obermann-Pless H, Samalecos A,
Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 58; SEQ ID NO 38; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN88608 standard; protein; 1049 AA.
                                                                                                                                                                                                                                                                                                                                 21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                               22-OCT-2002; 2002US-0419979P
29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          808 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                         (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-357427/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1047 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ADN88579.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of the invention
                                                                                                                                                                                                                                    WO2004037860-A1
                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kirchhoff C,
                                                                                                                                                                                                                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gottwald U,
                                                                                                                                               receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADN88608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADN88608
    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (ME6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility, in a male mammal and a method of treating infertility, in a male mammal. The polymucleotides expression or activity of the polypeptides. The sequences are useful for diagnosing or a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                              Human epididymis-specific receptor protein-6; HE6; male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                  Human epididymis-specific receptor protein-6 (HE6) polypeptide #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 63; DB 8; Length 1041; Best Local Similarity 100.0%; Pred. No. 0.19; Matches 10; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 58; SEQ ID NO 44; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADN88600 standard; protein; 1047 AA.
                                                                                          ADN88606 standard; protein; 1041 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Obermann-Pless H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-OCT-2003; 2003WO-EP011662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nubbemeyer R;
                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1041 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; ADN88582
                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kirchhoff C,
                                                                                                                                                                                      29-JUL-2004
```

06-MAY-2004

receptor.

ADN88606;

RESULT 34 ADN88606 Gottwald U,

ö

Gaps

ö

802

셤

ઠે

ADN88600;

RESULT 35 ADN88600

```
The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) 201 polypeptide and the rate epididymis-specific receptor protein-6 (ME6) 201 polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein composition comprising a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of disgnosing infertility in a male mammal and: a method of treating infertility in a male mammal. The polymucleotides expression contracting an encoding the polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. This sequences are useful for disgnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                        Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human epididymis-specific receptor protein-6; HE6;
male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human epididymis-specific receptor protein-6 (HE6) polypeptide #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 63; DB 8; Length 1055; 100.0%; Pred. No. 0.19; 1.ve 0; Mismatches 0; Indels (
                                                                                          Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Samalecos A,
                                                                                                                                                                                                                                                                                                                 Claim 58; SEQ ID NO 42; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN88602 standard; protein; 1057 AA.
                                                                                        Obermann-Pless H,
Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Obermann-Pless H,
  22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kirchhoff C, Obermann-Ple
Gottwald U, Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CWINNNAVFY 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY 10
                                              (SCHD ) SCHERING AG
                                                                                                                                                       WPI; 2004-357427/33
N-PSDB; ADN88581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-357427/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1055 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004037860-A1.
                                                                                        Kirchhoff C,
Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN88602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN88602
  #X#X##X##X####X#X###X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (RE6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infeffility in a male mammal and a method of treating infeffility in a male mammal. The polymucleotides expression or activity of the polypeptides. The sequences are useful for diagnosing or a method of sequences are useful for diagnosing a male math reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human epididymis-specific receptor protein-6; HE6; male reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human epididymis-specific receptor protein-6 (HE6) polypeptide #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 63; DB 8; Length 1049; 100.0%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                     Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 58; SEQ ID NO 46; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADN88604 standard; protein; 1055 AA.
                                                                                                                                                                                                                                                                  Obermann-Pless H,
Nubbemeyer R;
                                                                                                                                21-OCT-2003; 2003WO-EP011662
                                                                                                                                                                            22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-OCT-2003; 2003WO-EP011662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2004 • (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                 2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      810 CWINNNAVFY
                                                                                                                                                                                                                    (SCHD ) SCHERING AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1049 AA;
                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ADN88583
                                       WO2004037860-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004037860-A1
Homo sapiens.
                                                                                                                                                                                                                                                           Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-MAY-2004.
                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                                                       Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADN88604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    receptor
```

RESULT 37 ADN88604

g

ð

ö

Gaps

```
슝
                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (RE6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein-6 of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polynucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal and a method of treating infertility in a male mammal and a method of treating infertility in a male mammal and a method of treating infertility in a male mammal and a method of cativity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                           Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated human, mouse or rat epididymis-specific receptor protein-6 polypeptide, useful for isolating agents used for treating male infertility, or for male contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            n epididymis-specific receptor protein-6; HE6;
reproductive disorder; infertility; antiinfertility; contraceptive;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human epididymis-specific receptor protein-6 (HE6) polypeptide #14.
                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                   8; Length 1057;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Samalecos A, Osterhoff C;
                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  Score 63; DB 8
Pred. No. 0.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                        Claim 58; SEQ ID NO 40; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADN88610 standard; protein; 1071 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human epididymis-specific receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Obermann-Pless H,
                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-OCT-2003; 2003WO-EF011662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-OCT-2002; 2002US-0419979P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nubbemeyer R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              818 CWINNNAVFY 827
                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                           Novel isolated human,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2004-357427/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNNAVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SCHD ) SCHERING AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-357427/:
N-PSDB; ADN88584.
N-PSDB; ADN88580.
                                                                                                                                                                                                                                                                                                                                       of the invention.
                                                                                                                                                                                                                                                                                                                                                                     Sequence 1057 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004037860-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kirchhoff C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gottwald U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADN88610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            male
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
ð
```

Claim 58; SEQ ID NO 48; 127pp; English.

```
;
0
The invention relates to the human epididymis-specific receptor protein-6 (HE6) polypeptide, the mouse epididymis-specific receptor protein-6 (ME6) polypeptide and the rat epididymis-specific receptor protein-6 (ME6) polypeptide. The invention also relates to an antibody or its fragment specific for the HE6, ME6 or RE6 polypeptide, a pharmaceutical composition comprising an antisense nucleotide which can bind with any of the nucleotide sequences encoding an epididymis-specific receptor protein of the invention, a pharmaceutical composition for treating a male reproductive disorder comprising a polymucleotide of the invention, a method of diagnosing infertility in a male mammal and a method of treating infertility in a male mammal and a method of polypeptides are useful for isolating an agent that modulates expression or activity of the polypeptides. The sequences are useful for diagnosing a male reproductive disorder. This sequence represents an HE6 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to a novel method of identifying ligands to an orphan receptor protein which comprises transforming cells with DNA encoding a fusion protein of the orphan receptor with a fluorescent protein, so that the fusion protein is expressed in the cells (or cell membranes isolated from them) and contacting the cells with the potential ligand to be tested. A suitable fluorescent protein for incorporation in the fusion protein is green fluorescent protein (GFP), for example GFP-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Transformation of cells with a fusion protein of an orphan receptor protein with a fluorescent protein useful for identification of ligands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ligand; orphan receptor protein; fusion protein; fluorescent protein; cell expression; green fluorescent protein; GFP; GFP-1; wild-type GFP; GFPuv; Enhanced GFP; EGFP; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hosoya
                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 63; DB 8; Length 1071; 100.0%; Pred. No. 0.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kawamata Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Orphan receptor ligand-related human protein SeqID38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 38; 594pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Komatsu H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADF70415 standard; protein; 1252 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-FEB-2003; 2003WO-JP001901.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-FEB-2002; 2002JP-00045728.
23-JUL-2002; 2002JP-00213949.
11-OCT-2002; 2002JP-00298237.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ogi K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TAKE ) TAKEDA CHEM IND LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CWINNNAVFY 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to the orphan receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fujii R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-697654/66
                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; ADF70517.
                                                                                                                                                                                                                                                                                                                                                          Sequence 1071 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003071272-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADF70415;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  832
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hinuma
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 40
```

wild-type GFP, GFPuv or Enhanced GFP (EGFP). The method is useful for the identification of ligands binding to an orphan receptor protein. ឧដ្ឋឧ

Sequence 1252 AA;

Query Match 100.0%; Score 63; DB 7; Length 1252; Best Local Similarity 100.0%; Pred. No. 0.23; Matches 10; Conservative 0; Mismatches 0; Indels 0

ö

0; Gaps

1 CWINNNAVFY 10 ||||||||| 775 CWINNNAVFY 784 ઠે qq

Search completed: October 20, 2005, 07:41:25 Job time : 166 secs

## THIS PAGE BLANK (USPTU)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model

Run on:

October 20, 2005, 05:49:15 ; Search time 22 Seconds (without alignments) 43.735 Million cell updates/sec

US-10-668-181-6 63 . 1 CWINNNAVFY 10 Title: Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

	Description	hypothetical prote	ZK112.1 protein -	lecithin-cholester	phosphatidylcholin	phosphatidylcholin	phosphatidylcholin	hypothetical prote	phosphatidylcholin	te lyase r	protein -	cspB protein - Clo	transcription fact			NADH2 dehydrogenas	NADH2 dehydrogenas	O-antigen polymera	B-band O-antigen p	DNA-directed RNA p	cyclomaltodextrin	cyclomaltodextrin	a)	expansin EXP5 [imp	expansin-like prot	N-acetylmuramoyl-L	Stilp protein - fi	low-affinity inorg	NADH2 dehydrogenas	hypothetical prote
SUMMAKIES	£	T22904	S44886	150662	XXHUN	XXRTN	JC1502	S22616	XXMSN	A96999	140608	S57714	JQ2010	G95998	T12032	T12031	T12033	S77588	D83251	S72283	ALBSG3	ALBSG1	B97033	T50655	T48247	AC1350	828606	D84998	T11231	T31037
	DB	7	7	~		-	~	~	1	~	7	~	Н	7	~	0	~	~	7	~	-	ч	~	~	~	7	~	~	~	N
	Length	621	534	413	440	440	440	204	438	564	590	635	559	162	355	355	355	438	438	575	712	713	2817	255	258	375	395	490	677	778
d	Query Match	74.6	65.1	63.5	63.5	63.5	63.5	61.9	61.9	6.1.9	61.9	61.9	61.1	60.3	.60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	58.7	58.7	58.7	58.7	58.7	58.7	58.7
	Score	47	41	40	40	40	40	39	39	39	39	39	38.5	38	38	38	38	38	38	38	38	38	38	37	37	37	37	37	37	37
	Result No.		7	m	4	2	9	7	œ	o,	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	. 25	26	27	28	53

conserved hypothet	microbial collagen	hypothetical prote	hypothetical prote	hypothetical prote	hypothetical prote	expansin EXP1 (imp	probable expansin	hypothetical prote	hypothetical prote	mSAPla - mouse	amino acid transpo	probable serine ca	fusion of Uroporph	cAMP receptor subt
D82940	A36866	B81005	T46237	A70922	F84716	T50654	C84444	T22285	F69957	148755	A64376	E84619	A97295	A46391
٥.	٠,	7	0	~	~	~	~	~	~	ď	~	~	~	0
1967	1104	114	1672	156	169	237	248	336	353	430	435	437	483	490
58.7	58.7	57.9	57.9	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
37	37	36.5	36.5	36	36	36	36	36	36	36	36	36	36	36
30	35	33	34	35	36	37	38	39	40	41	42	43	44	45

## ALIGNMENTS

RESULT 1

_	
	T22904
	hypothetical protein F58B4.1 - Caenorhabditis elegans
	C;Species: Caenorhabditis elegans
	C;Date: 15-Oct-1999 #sequence revision 15-Oct-1999 #text_change 09-Jul-2004
	C;Accession: T22904
_	R;Wilkinson, J.
_	submitted to the EMBL Data Library, June 1996
_	A:Reference number: 219634
	A;Accession: T22904
	A;Status: preliminary; translated from GB/EMBL/DDBJ
	A; Molecule type: DNA
	A;Residues: 1-621 <wil></wil>
	A;Cross-references: UNIPROT:Q20975; EMBL:Z74038; PIDN:CAA98497.1; GSPDB:GN00023; CESP:FS
	A; Experimental source: clone F58B4
	C;Genetics:
	A;Gene: CESP:F58B4.1
	A;Map position: 5
	A;Introns: 47/3; 94/3; 135/2; 157/1; 185/1; 218/3; 253/3; 328/1; 366/3; 447/2; 511/2; 58
	Query Match 74.6%; Score 47; DB 2; Length 621;
	Best Local Similarity 70.0%; Pred. No. 3.2;
	בי וודפווומרכזוכם די דוותפדם כי כתהם

# 1 CWINNNAVFY 10 ò

ZK112.1 protein - Caenorhabditis elegans C:Species: Caenorhabditis elegans C:Date: 14-Sep-1994 #sequence\_revision 12-May-1995 #text\_change 09-Jul-2004 C:Accession: S44886 612 CWMNNNNFY 621 RESULT 2 S44886 ద

Note that the control of the C. elegans cosmid ZK112.

Submitted to the EMBL Data Library, May 1993

Submitted to the EMBL Data Library, May 1993

Submitted to the EMBL Data Library, May 1993

A) Beguence number: S44616

A) Reference number: S44816

A) Reference preliminary

A) Redecule type: DNA

A) Residues: 1-534 < DNA

A) Residues: 1-534 < DNA

A) Cross-references: UNIPROT: P34610; EMBL: L14324; NID: g289740; PID: g289741

C) Genetics

C) Genetics

C) Superfamily: Caenorhabditis elegans ZK688.6 protein

Gaps ö Query Match 65.1%; Score 41; DB 2; Length 534; Best Local Similarity 75.0%; Pred. No. 28; Matches 6; Conservative 1; Mismatches 1; Indels

ö

a

oŧ

```
A;Molecule type: protein
A;Molecule type: protein
B;Residues: 25-284, (°, '286-333, 'Q', '335-440 <YAN\>
R;Residues: 25-284, (°, '286-333, 'Q', '335-940 or 'T.; Ohta, Y.; Shimada, T.; Saito, Y.;
Biochem. Biophys. Res. Commun. 181, 933-940, 1991
A;Title: Molecular defect in familial lecithin:cholesterol acyltransferase (LCAT) defici A;Reference number: 152260; MUID:92109783; PMID:1662503
A;Reference number: 152260; MUID:92109783; PMID:1662503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A pescription: catalyzes the transfer of sn-2 fatty acyl groups from phosphatidylcholine A, Description: catalyzes the transfer of sn-2 fatty acyl groups from phosphatidylcholine-sterol acyltransferase (5.8 perfamily: phosphatidylcholine-sterol; glycoprotein; lipid metabolism; lipoprotein F;1-24/Domain: signal sequence #status predicted <5.5%.
F;25-440/Product: phosphatidylcholine-sterol acyltransferase #status experimental <ART>
F;25-440/Product: phosphatidylcholine-sterol acyltransferase #status experimental <ART>
F;41,108,295,408/Binding site: carbohydrate (Asn) (covalent) #status experimental F;431/Binding site: carbohydrate (Ser) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phosphatidylcholine-sterol O-acyltransferase (EC 2.3.1.43) precursor - rat
N;Alternate names: lecithin-cholesterol acyltransferase precursor; phospholipid-cholesterol
S;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: $11214; $11302
C;Accession: $11214; $1302
Mucleic Acids Res. 18, 3508, 1990
A;Title: Nucleotide sequence of the CDNA for lecithin-cholesterol acyl transferase (LCAT)
A;Reference number: $11214; MUID:90384859; PMID:2402469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-389,'G','391-440 <TAR>
A;Cross-references: EMBL:X54096; NID:g56563; PIDN:CAA38030.1; PID:g56564
C;Comment: The active enzyme catalyzes the transfer of acyl groups from lecithin to sterr cluding cholesterol, can act as acceptor. Apolipoprotein A-I is a potent activator for th A;Gene: LCAT
           mode
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Title: Site-specific detection and structural characterization of the glycosylation pectrometry and sequential glycosidase digestion.
A;Reference number: A57914, MUID:95338133; PMID:761347
A;Contents: annotation; peptide sequences, N- and O-glycosylation
C;Comment: Apolipoprotein A-I (see PIR:LPHUAI) is a potent activator of this enzyme.
       A,Title: Lecithin: cholesterol acyltransferase. Functional regions and a structural A,Reference number: A29133; MUID:87137578; PMID:2880847
                                                                                                                                                                                                                                                                                                                                                                   A Status: translated from GB/EMBL/DDBJ
A, Status: Lranslated from GB/EMBL/DDBJ
A, Molecule type: DNA
A, Molecule type: DNA
A, Cross-references: GB:874079; NID:g241428; PIDN:AAB20750.1; PID:g241429
A, Cross-references: Aint mutant sequence
A, Note: defective frame shift mutant sequence
R;Schindler, P.A.; Settineri, C.A.; Collet, X.; Fielding, C.J.; Burlingame, A.L.
Protein Sci. 4, 791-803, 1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Lengt'n 440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63.5%; Score 40; DB
60.0%; Pred. No. 34;
ive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Toross-reference: UNIPROT:P18424; EMBL:X54096
R; Taramelli, R.
submitted to the EMBL Data Library, July 1990
A; Reference number: S11302
A; Accession: S11302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GDB:119359; OMIM:245900
A;Map position: 16q22.1-16q22.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CWIDNTRVVY 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: S11214
A; Molecule type: mRNA
A; Residues: 1-440 < MER>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
                                                                                    A; Accession: A29133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics:
A;Gene: GDB:LCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              iccithin-cholesterol acyltransferase - chicken (fragment)
[Species: Gallus gallus (chicken)
[Species: Gallus gallus (chicken)
[Species: Gallus gallus (chicken)
[Species: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
[Schacession: 150662]
[Schacession: 150662]
[Schacession: 150662]
[Species: 1-413 chicken Lecithin-Cholesterol Acyltransferase. Molecular Characterization reveal
[Schacession: 150662]
[Schacession: 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63.5%; Score 40; DB 2; Length 413; 60.0%; Pred. No. 32; ive 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CWIDNTRVVY 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CWINNNAVFY 10
                                                                254 WLNNNTVF 261
σ
WINNNAVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

ო

```
phosphatidylcholine-sterol O-acyltransferase (EC 2.3.1.43) precursor - mouse
N/Alternate names: lecithin-cholesterol acyltransferase precursor; phospholipid-choleste
                                                                                                                                                                                                                                                                                                                                                                          A Molecule type: mRNA
Afsestiuces: 1-438 eVARA.
A/Gross-references: UNIPROT: P16301; GB: U05154; NID: 9198759; PIDN: AAA39419.1; PID: 9293697
A/Note: the authors translated the codon ATG for residue 411 as Leu
A/Note: the authors translated the codon ATG for residue 411 as Leu
BAMESTONI, G.; Malgaretti, N.; Magnaghi, P.; Taramelli, R.
Submitted to the EMBL Data Library, July 1990
A/Description: Promoter and 5' flanking sequences of the mouse LCAT gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A,Residues: 1-14 <MERA
A,Cross-references: EMBL:X54095; NID:g52873; PIDN:CAA38029.1; PID:g52874
C,Comment: The active enzyme catalyzes the transfer of acyl groups from lecithin to ster cluding cholesterol, can act as acceptor. Apoliopprotein A-I is a potent activator for t C,Superfamily: phosphatidylcholine-sterol acyltransferase
C,Keywords: acyltransferase; glycoprotein; lipid metabolism; lipoprotein
F;1-24/Domain: signal sequence #status predicted <SIG>F;25-438/Product: phosphatidylcholine-sterol acyltransferase #status predicted <MAT>F;44,108,296,408/Binding site: carbohydrate (Asn) (covalont) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C,Accession: A5699
R;Nolling, J; Breton, G;; Omelchenko, M.V; Markarova, K.S.; Zeng, Q.; Gibson, R.; Lee,
J; Bacteriol. 183, 4823-4838, 2001
A;Title: Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium Clo
A;Reference number: A96900; MUID:21359325; PMID:21359325
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:Q97KW2; GB:AE001437; PIDN:AAK78780.1; PID:g15023693; GSPDB:G
A;Experimental source: Clostridium acetobutylicum ATCC824
C;Genetics:
                                                                                                                                                 C,Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: A34158; S21370
R;Warden, C.H.; Langner, C.A.; Gordon, J.I.; Taylor, B.A.; McLean, J.W.; Lusis, A.J.
A; Biol. Chem. 264, 21573-21581, 1989
A;Title: Tissue-specific expression, developmental regulation, and chromosomal mapping A;Reference number: A34158; MUID:90094326; PMID:2600083
A;Accession: A34158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - Clostridium acetobutylicum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: Clostridium acetobutylicum
C;Species: 14-Sep_2001 #sequence_revision 14-Sep-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 438;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pectate lyase related protein, secreted [imported]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 39; DB 2
Pred. No. 64;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 61.9%; Score 39; DB 50.0%; Pred. No. 50; ative 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cspA protein - Clostridium acetobutylicum
                                                                                                                              Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 55.6
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98 CWIDNTRIVY 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |::|| :||
299 WVHNNDLFY 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A, Reference number: S21370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Gene: CAC0804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A96999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         phosphatidylcholine-stern1 O-acyltransferase (EC 2.3.1.43) precursor - baboon N;Alternate names: lecithin-cholesterol acyltransferase C;Species: Papio sp. (baboon)
C;Date: 24-Feb-1994 #sequence_revision 24-Feb-1994 #text_change 03-Jun-2002
C;Accession: JC1502
C;Accession: JC1502
C;Accession: JC1502
C;Accession: JC1502
R;Hixson, J.E.; Driscoll, D.M.; Birnbaum, S.; Britten, M.L.
Gene 128, 295-299, 1993
A;Title: Baboon lecithin cholesterol acyltransferase (LCAT): cDNA sequences of two allel A;Reference number: JC1502; MUID:93293002; PMID:8514197
A;Accession: JC1502
A;Molecule type: mRNA
A;Residues: 1-40 cHIX>
A;Coss-references: GB:L08633; NID:9176591; PIDN:AAA35388.1; PID:9176592
C;Comment: This enzyme is a key enzyme of cholesterol metabolism that catalyzes esterific C;Genetics:
C;Genetics:
C;Genetics:
A;Gene: LCAT
C;Genetics:
A;Gene: LCAT
C;Superfamily: phosphatidylcholine-sterol acyltransferase
C;Geywords: acyltransferase
F;1-24/Domain: signal sequence #status predicted <SIG>F;25-440/Product: phosphatidylcholine-sterol O-acyltransferase #status predicted <PPC>F;25-440/Product: phosphatidylcholine-sterol O-acyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein 14.9 - Salmonella choleraesuis
C;Species: Salmonella choleraesuis
C;Accession: S22616
M;R;Erown, P.K.; Romana, L.K.; Reeves, P.R.
Mol. Microbiol. 6, 1385-1394, 1992
A;Title: Molecular analysis of the rfb gene cluster of Salmonella serovar muenchen (stra A;Reference number: S22613; MUID:92349966; PMID:1379320
A;Accession: S22616
A;Accession: S22616
A;Accession: S22616
A;Molecule type: DNA
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-204 cBRO>
A;Cross-references: EMBL:X61917; NID:947004; PIDN:CAA43910.1; PID:947008
C;Superfamily: galactoside acetyltransferase
C; Superfamily: phosphatidylcholine-sterol acyltransferase
C; Keywords: acyltransferase: glycoprotein; lipid metabolism; lipoprotein
F; 1-24/Domain: signal sequence #status predicted <SIG.
F; 25-438/Product: phosphatidylcholine-sterol acyltransferase #status predicted <MAT>
F; 44, 108, 296, 408/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                        DB 1; Length 440;
34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 2; Length 440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61.9%; Score 39; DB 2; Length 204; 75.0%; Pred. No. 23; ive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 40; DB 2
Pred. No. 34;
1; Mismatches
                                                                                                                                                                                                                  Pred. No. 34;
1; Mismatches
                                                                                                                                                                                        Score 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63.5%;
                                                                                                                                                                                  63.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Conservative
                                                                                                                                                                                                                                                      6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Conservative
                                                                                                                                                                                                                                                                                                                                                       CWIDNTRVVY 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CWIDNTRVVY 107
                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CWIGDNAV 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CWINNNAV 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                  Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

ö

ö

mag

Gaps

3,

Length 559;

1;

В

```
Rifinan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Hernand, P.; Vorholter, E.J.; Hernand, Proc. Malt. Acad. SGi. U.S.A. 98, 9889-9894, 2001
A; Mitle: The complete sequence of the 1,683-kb pSymB megaplasmid from the N2-fixing endos A; Reference number: A95842; MUID:21196508; PMID:11481431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Residues: 1-162 -KUR.

A; Residues: 1-162 -KUR.

A; Cross-references: UNIPROT:092082; GB:AL591985; PIDN:CAC49655.1; PID:g15141142; GSPDB:GN

A; Experimental source: strain 1021, megaplasmid pSyMB

R; Galibert, F.; Finan, T.M.; Long, S.R.; Puhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler,

pela, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.;

L.; Hyman, R.W.; Jones, T.

Science 293, 668-672, 2001

A; Authors: Kahn, D.; Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure,

A; Title: The composite genome of the legume symbiont Sinorhizobium mellioti.

A; Reference number: A96039; MUID:21368234; PMID:11474104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Accession: T12032
R;Imura, Y.; Su, Z.H.; Kim, C.G.; Osawa, S.
Elytra 26, 223-248, 1998
A;Title: Reorganization of the Oreocarabus complex (Coleoptera, Carabidae) based on endog
A;Reference number: 217381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 (isolate Mt. Khumaratkhok Russia) C;Species: mitochondrion Carabus cribratus C;Date: 05-Nov-1999 #sequence_revision 05-Nov-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Superfamily: NADH dehydrogenase (ubiquinone) chain 5
C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probable acetyltransferase protein [imported] - Sinorhizobium meliloti (strain 1021) C;Species: Sinorhizobium meliloti (C;Species: Sinorhizobium meliloti (C;Dete: 24-Aug-2001 #sequence_revision 24-Aug-2001 #text_change 09-Jul-2004 C;Accession: G95998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:079580; EMBL:AB017461; PIDN:BAA33177.1
A;Experimental source: isolate Mt. Khumaratkhok Russia; adult; thorax
           C;Keywords: DNA binding; homeobox; nucleus; transcription regulation F;266-333/Domain: POU domain homology <POU>
F;352-408/Domain: homeobox homology <HOX>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 38; DB 2;
Pred. No. 26;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Status: preliminary, translated from GB/EMBL/DDBJ
A,Molecule type: DNA
                                                                                                                                                           61.1%; Score 38.5; D
53.8%; Pred. No. 77;
tive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60.3%;
50.0%;
                                                                                                                                                                                                  larity 53.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                    CWSNNNYIRDDFY 160
                                                                                                                                                                                                                                                                                                                  1 CWINNNAV---FY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 50.0
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |::|:
CYVNSGCVFY
                                                                                                                                                               Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Residues: 1-355 < IMU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Contents: annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: preliminary A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: G95998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: T12032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Genome: plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,Gene: SMb21427
                                                                                                                                                                                                                                                                                                                                                                                            148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Note: ND5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transcription factor POU-1 - planarian (Dugesia japonica)
(190cios: Dugesia japonica
(190cios: Oliver)
C;Species: Clostridium acetobutylicum
C;Date: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 09-Jul-2004
C;Date: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 09-Jul-2004
C;Accession: 1460618, 59255
B;Sanchez-Beatco, A.R.; FROMda, C.; Garcia, J.L.
J. Bacteriol. 177, 1098-1103, 1995
A;Title: Tracking the evolution of the bacterial choline-binding domain: molecular chara
B;Reference number: 140607; MUID:95164512; PMID:7860591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CJo
                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: UNIPROT:Q45819; EMBL:Z37723; NID:g550295; PIDN:CAA85778.1; PID:g5502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:Q45820; EMBL:Z50008; NID:g895756; PIDN:CAA90303.1; PID:g8957
F;522-34/Domain: cpl repeat homology <CPl>
F;542-561/Domain: cpl repeat homology <CP2>
F;642-621/Domain: cpl repeat homology <CP2>
F;602-621/Domain: cpl repeat homology <CP2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Sanchez-Beato, A.; Garcia, J.
submitted to the EMBL Data Library, July 1995
A;Description: Molecular characterization of a family of choline-binding proteins of
A;Reference number: S57714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cspB protein - Clostridium acetobutylicum
C;Species: Clostridium acetobutylicum
C;Date: 19-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
C;Accession: S57714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 635;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                A.Accession: 140608
A.Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 39; DB 2
Pred. No. 67;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 39; DB 2
Pred. No. 72;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;501-520/Domain: cpl repeat homology <CPl>F;521-540/Domain: cpl repeat homology <CP2>F;541-560/Domain: cpl repeat homology <CP3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61.9%;
55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61.9%;
llarity 55.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |:|:| ||
554 WLNDNGTFY 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |:||| :| wLNNNGTWY 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
5, Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-635 <SAN>
                                                                                                                                                                                                                                                                                                                                                                                    A; Residues: 1-590 <RES>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Accession: S57714
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Gene: cspA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      C, Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

ö

Gaps

. 0

Length 162; Indels

```
ö
                                           Gaps
                                           ;
Query Match
60.3%; Score 38; DB 2; Length 355;
Best Local Similarity 55.6%; Pred. No. 59;
Matches 5; Conservative 3; Mismatches 1; Indels
                                         1; Indels
```

|::|:'|| 260 WVSNSLVFY 268 2 WINNNAVFY 10 ò

RESULT 15
NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Carabus cribratus mitochondrion (Species: mitochondrion (Carabus cribratus)
C;Species: mitochondrion (Carabus cribratus)
C;Date: 05-Nov-1999 #sequence\_revision 05-Nov-1999 #text\_change 09-Jul-2004
C;Accession: 171201
R;Imura, Y.; Su, Z.H.; Kim, C.G.; Osawa, S.
Elytra 26, 223-248, 1998
A;Title: Reorganization of the Oreocarabus complex (Coleoptera, Carabidae) based on endc
A;Reference number: 217381
A;Accession: T12031
A;Accession: T12031
A;Accession: T12031
A;Residues: 1-355 <1MU>
A;Residues: 1-355 <1MU>
A;Residues: 1-355 <1MU>
A;Cosarimental source: isolate Artvin Turkey; adult; thorax muscle
C;Genetics:
A;Cenetics:

Gaps ö Query Match 60.3%; Score 38; DB 2; Length 355; Best Local Similarity 55.6%; Pred. No. 59; Matches 5; Conservative 3; Mismatches 1; Indels

ö

ઠે g

Search completed: October 20, 2005, 05:49:54 Job time : 26 secs

### THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
```

OM protein - protein search, using sw model Run on:

October 20, 2005, 05:49:15; Search time 55 Seconds (without alignments) 93.105 Million cell updates/sec

US-10-668-181-6 63 1 CWINNAVFY 10 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

1612378 seqs, 512079187 residues Searched:

1612378 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Description	Q8izp9 homo sapien	Q8cj12 mus musculu	Q8cj11 rattus norv		Q6csg6 kluyveromyc	O8izf6 homo sapien					Q70ux2 graphiurus								Ogglr5 erinaceus e	Q64sfl bacteroides						Q70ux5 myomimus ro		Q70uw8 aplodontia			008944 peromyscus
OI	GP64 HUMAN	GP64 MOUSE	GP64_RAT	Q20975	Ŏecsee	G112 HUMAN	QBIFE2	ОЭГОМЗ	Q9EPE5	Q7RLD7	Q70UX2	Q70UX6	Q70UX1	Q70UW9	Q70UX0	Q70UX3	Q70UX4	Q70UX7	Q9GLR5	Q64SF1	Q832C2	035591	LCAT_ELIQU	PCP1_CAEEL	Q7RF <u>I</u> 0	Q70UX5	008942	Q70UW8	Q9ESE7	008935	008944
DB		<b>.</b>	-	~	~	ч	~	~	~	~	~	~	~	7	~	~	~	~	~	~	~	~	н	-	~	~	~	~	7	~	N
% Query Match Length	1017	1009	1013	578	266	2799	128	168	268	779	105	125	126	136	136	136	136	136	141	191	282	297	299	565	572	124	134	134	135	138	140
* Query Match	0.00	85.7	77.8	74.6	69.8	68.3	66.7	66.7	66.7	66.7	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	63.5	63.5	63.5	63.5	63.5	63.5
Score	63	54	49	47	44	43	42	42	42	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	40	40	40	40	40	40
Result No.	-	7	m	4	S	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

didelp mus mu	Q8hza0 macaca sp. Q8hzal pongo pygma Q9epc9 sicista kaz		Q9epe7 acomys cahi Q91yb3 saccostomus	Q9epd7 mesocricetu Q9epc8 steatomys s	-	·O
Q9GLR6 Q811E4	Q8HZAO Q8HZA1 Q9EPC9	Q9EPE4 Q9EPD6	Q9EPE7 Q91YB3	Q9EPD7 Q9EPC8	Q9EPC7 Q9EPE0	Q91YH4
00	0 0 0	0 0	~ ~	0 0	~ ~	~
148	209 209 256	258	264 265	265 266	267	268
63.5	63.5 63.5	63.5 63.5	63.5 63.5	63.5 63.5	63.5 63.5	63.5
4 4 0 0	4 4 4 0 0 0	4 4 0 0	4 4 0 0	4 4 0 0	4 4 0 0	40
32	33 34 4 52 64	37	39 40	412	4 4 6 4	45

## ALIGNMENTS

```
TISSUE-Epididymis;
MEDLINE-22307585; PubMed=12420295; DOI=10.1002/mrd.10220;
MEDLINE-22307585; PubMed=12420295; DOI=10.1002/mrd.10220;
MEDLINE-22307585; PubMed=12420295; DOI=10.1002/mrd.10220;
Mixchan H., Samalecos A., Osterhoff C., Schroeder B., Heller R.,
Kirchoff C.;
"HE6, a two-subunit heptahelical receptor associated with apical
membranes of efferent and epididymal duct epithelia.";
Mol. Reprod. Dev. 64:13-26(203).
-!-FUNCTION: Could be involved in a signal transduction pathway
controlling epidymal function and male fertility.
-!-SUBUNIT: Forms a heterodimer, consisting of a large extracellular
region linked to a seven-transmembrane moiety (Probable).
-!-ALTERNATIVE PRODUCTS:
                                                                 29-WAR-2004 (Rel. 43, Created)
29-WAR-2004 (Rel. 43, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
G protein-coupled receptor 64 precursor (Epididymis-specific protein
                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (ISOFORM 2).
TISSCREE pidldymis,
MEDILINE=97294669; PubMed=9150425;
Osterhoff C., Ivell R., Kirchhoff C.;
"Cloning of a human epidldymis-specific mRNA, HE6, encoding a novel member of the seven transmembrane-domain receptor superfamily.";
DNA Cell Biol, 16:379-389(1997).
                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
GP64 HUMAN STANDARD; PRT; 1017 AA.
QBIZE9; 000406; QBIWT2; QBIZE4; QBIZE5; QBIZE6; QBIZE7; QBIZP3;
QBIZPA;
                                                                                                                                                                                                                                                                                                                                                                                                                  [2] SEQUENCE FROM N.A. (ISOFORMS 1; 3; 4; 5; 6; 7; 8 AND 9).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Event=Alternative splicing; Named isoforms=9;
Name=1; Synonyms=Long splice variant;
IsoId=Q8IZP9-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=5; Synonyms=23;
Iso1d=QB1ZP9-5; Sequence=VSP_009794;
Name=6; Synonyms=d3;
Iso1d=QB1ZP9-6; Sequence=VSP_009795;
Name=7; Synonyms=d2;
Iso1d=QB1ZP9-7; Sequence=VSP_009796;
Name=8; Synonyms=21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=3; Synonyms=d1;
IsoId=Q8IZP9-3; Sequence=VSP_009792;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence=VSP_009791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence=VSP_009793;
                                                                                                                                               6) (He6 receptor).
Name=GPR64; Synonyms=HE6, TM7LN2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=4; Synonyms=24;
IsoId=Q8IZP9-4; Sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Isold=Q8IZP9-2;
                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                            NCBI_TaxID=9606;
```

```
Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
   370
   370
   CARROHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        æ
   Ē
                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
            Name=9; Synonyms=Delta exon 28; Isola-QBIZP9-9; Sequence=VSP 009798; Isola-QBIZP9-9; Sequence=VSP 009798; TISSUE SPECIFICITY: Epididymys specific. Both subunits were associated with apical membranes of efferent ductule and proximal epididymal duct epithelia. Fifth: Proteolytically cleaved into 2 subunits, an extracellular subunit and a seven-transmembrane subunit (Potential). SIMILARITY: Belongs to the G-protein coupled receptor 2 family. SIMILARITY: Contains 1 GPS domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R InterPro; IPR000832; GPCR secretin.

R InterPro; IPR000083; FRD_Cys_rich.

R Fram; PF001002; 7FLZ; 1.

R PF011825; GPCR; 1.

R PRMTF; SM00139; GPCRSECRETIN.

SMART; SM00139; GPCRSECRETIN.

R SMART; SM00139; GPCRSECRETIN.

R PROSITE; PS50261; GPROTEIN RECEP_F2_1; 1.

PROSITE; PS50261; GPROTEIN RECEP_F2_4; 1.

R SIGNAL

T SIGNAL

T SIGNAL

T SMANNERM 628 648 107 GPCRETIAL (Potential).

T TRANSMEM 668 688 687 CYCOPJaemic (Potential).

T TRANSMEM 668 688 EXTRACEBIULAR (Potential).

T TRANSMEM 699 693 EXTRACEBIULAR (Potential).

T TRANSMEM 718 719 789 189 EXTRACEBIULAR (Potential).

T TRANSMEM 718 719 789 EXTRACEBIULAR (Potential).

T TRANSMEM 818 818 PODMAIN 818 818 POLY-EU.

T DOMAIN 818 819 POLY-EU.

T DOMAIN 816 819 POLY-EU.

T DOMAIN 816 819 POLY-EU.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GlcNAc.
(GlcNAc.
(GlcNAc.
(GlcNAc.
(GlcNAc.
(GlcNAc.
   IsoId=Q8IZP9-8; Sequence=VSP_009797;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
                                                                                                                                                                                                                                                                                                                                                   EMBL, AF538954; AAN33056.1) --
EMBL, AF53945; AAN33064.1; --
EMBL, AX143364; AAN33065.1; --
EMBL, AX143365; AAN38971.1; --
EMBL, AX143365; AAN38973.1; --
EMBL, AX143365; AAN38973.1; --
EMBL, AX143367; AAN38973.1; --
EMBL, AX14367; AAN38974.1; --
EMBL, AX148343; AAN75702.1; --
                                                                                                                                                                                                                                                                                                                                      EMBL; X81892; CAA57479.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HGNC:4516; GPR64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MIM; 602657;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genew;
```

370 N-linked (GlCNAC) (Potential). 435 N-linked (GlCNAC) (Potential). 456 N-linked (GlCNAC) (Potential). 451 N-linked (GlCNAC) (Potential). 452 N-linked (GlCNAC) (Potential). 528 N-linked (GlCNAC) (Potential). 542 N-linked (GlCNAC) (Potential). 551 N-linked (GlCNAC) (Potential). 552 N-linked (GlCNAC) (Potential). 67 Missing (In isoform) (Potential). 67 Missing (In isoform) (Potential). 67 Missing (In isoform) (Potential).	66 Missing (In isoform 3).  101 Missing (In isoform 4).  75 Missing (In isoform 4).  76 Missing (In isoform 5).  77 Missing (In isoform 5).  78 FILE-VSP 009793.  101 EVETTG-VSP 009794.  101 EVETTSLNDVTLSLLPSNETEKTKITIVKTFNAS -> DVT  102 LEALPSNET (in isoform 6).  7FILG-VSP 009795.  101 AKLSVVSFAFSSNGTPEVETTSLNDVTLSLLPSNETEKTKI  1 FIXTG-VSP 009796.  101 AKLSVVSFAFSNGTPEVETTSLNDVTLSLLPSNETEKTKI  1 FIXTG-VSP 009796.  7FILG-VSP 009796.  7FILG-VSP 009797.  81 MISSING (In isoform 8).  7FILG-VSP 009798.  7FILG-VSP 009798.	100.0%; Score 63; DB 1; Length 1017; servative 0; Mismatches 0; Indels 0; Gaps 0; AVFY 10        AVFY 10  STANDARD; PRT; 1009 AA. SGCJ08; Q8CJ09; Q8CJ10; 1.43, Created) 1.43, Last sequence update) 1.43, Last sequence update) 1.45, Last annotation update) 1.45, Last annotation update) 1.45, Last annotation (Ebididwmis-specific protein	ms=Me6; i; Chordata; Craniata; i; Chordata; Craniata; i; Rodentia; Sciurognat (ISOFORMS 1; 2; 4 AND DE=Epididymis; DEDMAG=12420295; DOI=1 Lecos A., Osterhoff C., tt heptahelical recepto cent and epididymal duc 64:13-26(2003). (ISOFORM 3).
8 5 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1 1 1 6	Similarity  10; Conservat  1 CWINNNAVFY 3                         3 CWINNNAVFY 5  CWINNNAVFY 7  SCHINNAVFY 7  CWINNNAVFY 7  CWINNNAVFY 7  SCHINNAVFY 7  SCHI	6) (Me6 receptor).  Name=Gpr64; Synonyms=Me6; Muse musculus (Mouse).  Bukaryota; Metazoa; Chord Mammalia; Eutheria; Roden MCBI_TaxID=10090;  13 SEQUENCE FROM N.A. (ISOPO STRAIN=NMRI; TISSUE=Epidi MEDLINE=22307585; PubMed-Obermann H., Samalecos A. Kirchhoff C.; MEG, a two-subunit hepta membranes of efferent and membranes of efferent and Mol. Reprod. Dev. 64:13-2 SEQUENCE FROM N.A. (ISOFC STRAIN-ESTBL/68]; TISSUE=WEDLINE=22354683; PubMed-Okazaki Y., Furuno M., Kalming M., Sain Mikaido I., Osaato N., Sain Maraki M., Sain M., Hasso
CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD CARBOHYD	VARSPLIC VARSPLIC VARSPLIC VARSPLIC VARSPLIC VARSPLIC VARSPLIC SEQUENCE	Match Local S les 10 1 778 2 20USE 64 MOUS 864 MOUS 9- MAR-20 9- MAR-20 9- MAR-20 10- DECE 100	(We receled have a property) (We receled have most and manual a; Euthorn to the most and most
		Query Best Match Qy Qy Db Co Db TD DT Co DT Co DT Co DT Co DD Co D	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 170
                                                                                                                                                                                                                                                           DOMAIN
TRANSMEM
DOMAIN
                                                                                                                            DOMAIN
TRANSMEM
                                                                                                                                                                    DOMAIN
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                        TRANSMEM
DOMAIN
                                                                                                                                                                                                                 DOMAIN
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                FRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                         TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
GP64_RAT
              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins RA
Balla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
Rabla E., Dragani T.A., Fletcher C.F., Forrest A., Gough J.,
A Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
A Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
Ranai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
Ronagaya A., Kurochkin I.V., Lee Y., Lenhard B.L., Miki H.,
Nagashima T., Namatas K., Okido T., Pevan W.J., Pertea G., Pesole G.,
Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Kingwal M.,
Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
Sultana R., Takenaka Y., Taylor M.S., Teasdala R.D., Tomita M.,
Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
Sultana R., Takenaka Y., Taylor M.S., Teasdale P., Hayatsu N.,
Himing L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
Yuan Z., Zavolan M., Zhu Y., Zimmer A., Garninch P., Hayatsu N.,
Shiraki T., Waki K., Kawai J., Aizawa K., Arakwa T., Fukuda S.,
Hirozane-Kishikawa T., Konno H., Nahamura M., Sakazume N., Sato K.,
Shiraki T., Waki K., Sasaki D., Shibata K., Shinagawa A.,
Yasunishi A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
Wasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
Nalyasaki Se the mouse transcriptome based on functional annotation of
C. -! FUNCTION: Could be involved in a signal transduction pathway
C. -! FUNCTION: Could be involved in a signal transduction pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstands. The European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         controlling epidymal function and male fertility.

-!- SUBUNIT: Forms a heterodimer, consisting of a large extracellular region linked to a seven-transmembrane moiety (Probable).
-!- SUBCELLULAR LOCATION: Integral membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isoid=Q8CJ12-5; Sequence=VSP_009806;
TISSUE SPECIFICITY: Epididymys-specific expression. Both subunits were associated with apical membranes of efferent ductule and proximal epididymal duct epitheliar proximal pididymal duct epitheliar PTM: Proteolytically cleaved into 2 subunits, an extracellular subunit and a seven-transmembrane subunit (Potential).
SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PRO0249; GPCRSECRETIN.
SMART; SWO0303; GPS9, 1.
PROSITE; PS00650; G PROTEIN RECEP F2_2; FALSE_NEG.
PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Event=Alternative splicing; Named isoforms=5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=3; Synonyms=d1;
IsoId=Q8CJ12-3; Sequence=VSP_009809;
Name=4; Synonyms=d3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=2; Synonyms=d2;
IsoId=Q8CJ12-2; Sequence=VSP_009808;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IsoId=Q8CJ12-4; Sequence=VSP_009807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=1; Synonyms=Long;
IsoId=Q8CJ12-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LN-TM7 subfamily.
SIMILARITY: Contains 1 GPS domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000832; GPCR_secretin.
InterPro; IPR000203; FRD_cys_rich.
Pfam; PF00002; 7tm_2; 1.
Pfam; PF01825; GPS; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL, AF538952, AAN33054.1; -. EMBL, AF538955, AAN33057.1; -. EMBL, AF538956, AAN33058.1; -. EMBL, AF538957; BAN33059.1; -. EMBL, AK046871; BAC32902.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD; MGI:2446854; Gpr64
```

```
GP64 RAT STANDARD; PRT; 1013 AA.
QBCJI1; QBCJ06; QBCJ07;
29-MAR-2004 (Rel. 43, Created)
29-WAR-2004 (Rel. 43, Last sequence update)
25-QTT-2004 (Rel. 45, Last annotation update)
G protein-coupled receptor 64 precursor (Epididymis-specific protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                     (Potential)
(Potential)
(Potential)
                                                                                                                                                                                                                                                                                                                                                                                                 (Potential)
(Potential)
(Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                  (Potential)
(Potential)
(Potential)
                                                                                                                                                                                                                                                                                                                                                                 (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
 G-protein coupled receptor; Glycoprotein;
                                                                                                                                                                                                                                                                                                         Potential)
                                                                                                                                                                                                                                                                                                                                                      Potential)
                                                                                                                                                                                                                                                                                                                                                                                        Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Potential)
                             G protein-coupled receptor 64.
Extracellular (Potential).
(Cytoplasmic (Potential).
2 (Potential).
2 (Potential).
Cytoplasmic (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
5 (Potential).
5 (Potential).
5 (Potential).
6 (Potential).
7 (Cytoplasmic (Potential).
7 (Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 54; DB 1; Length 1009;
Pred. No. 2.1;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A53C67C5527A5B6C CRC64;
                                                                                                                                                                    6 (Potential).
Extracellular (Potential).
                                                                                                                                                                                                    Cytoplasmic (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Missing (In isoform 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (In isoform 4)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (in isoform 2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (in isoform
                                                                                                                                                                                                                                                                                                         (Glcnac.
(Glcnac.
(Glcnac.
(Glcnac.
(Glcnac.
                                                                                                                                                                                                                                                                                                                                                                                                            (GlcNAc.
(GlcNAc.
(GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                        (GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GlcNAc
                                                                                                                                                                                                                                                                                                                                                                             (G1cNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  908600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GlcNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        009807
                                                                                                                                                                                            (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FTIG=VSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FTIG=VSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Missing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110199 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||||:||||||
CWINSNVVFY 779
                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CWINNNAVFY 10
       Signal; Transmembrane.
SIGNAL 1
Alternative splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1009 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                       871
559
248
664
664
917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64
```

ö

```
NCBI_TaxID=6239;
                DOMAIN
TRANSMEM
DOMAIN
DOMAIN
DOMAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARSPLIC
                                                                                                                                                              CARBOHYD
                                                                                                                                                                             CARBOHYD
                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                             CARBOHYD
                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                   SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).

STRAIN=Lewis; TISSUE=Epididymis;

MEDLINE=22307585; PubMed=12420295; DOI=10.1002/mrd.10220;

MEDLINE=22307585; PubMed=12420295; DOI=10.1002/mrd.10220;

A Kirchhoff C.;

"HEG, a two-subunit heptahelical receptor associated with apical rembranes of efferent and epididymal duct epithelia.";

MOI. Reprod. Dev. (4:13-26(2003).

-!-FUNCTION: Could be involved in a signal transduction pathway controlling epidymal function and male fertility.

-!- SUBUNIT: Forms a heterodimer, consisting of a large extracellular region linked to a seven-transmembrane moiety (Probable).

-!- SUBCELDULAR LOCATION: Integral membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                             Name=1: Synonyms=Long:
IsoId=Q8CJ11-1: Sequence=Displayed;
Name=2: Synonyms=d2;
Name=2: Synonyms=d1:
IsoId=Q8CJ11-2: Sequence=VSP_009810;
Name=3: Synonyms=d1:
IsoId=Q8CJ11-3: Sequence=VSP_009811;
IsoId=Q8CJ1-3: Sequence=VSP_00981;
IsoId=Q8CJ1-3: Sequenc
               Name=Gpr64; Synonyms=Re6;
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AF538953; AAN33055.1; --
R EMBL; AF538958; AAN33060.1; --
R EMBL; AF538959; AAN33061.1; --
R InterPro; IPR000832; GPCR secretin.
R InterPro; IPR000832; GPCR secretin.
R Pfam; PF0000503; PKD Cys_rich.
R Pfam; PF000249; GPCS FCRETIN.
R SMART; SM00303; GPS; 1.
R PROSITE; PS50261; GPCTEIN_RECEP_F2_2; FALSE_NEG.
R PROSITE; PS50261; GFS; 1.
M Alternative splitcing; G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G protein-coupled receptor 64. Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential).
5 (Potential).
Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                                                                                                                                Event=Alternative splicing; Named isoforms=3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Potential).
(Re6 receptor)
                                                                                   NCBI_TaxiD=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                38
624
645
685
685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
DOMAIN
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TRANSMEM
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRANSMEM
DOMAIN
TRANSMEM
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Nematoda, Chromadorea, Rhabditida, Rhabditoidea,
Rhabditidae, Peloderinae, Caenorhabditis.
                                                                                                                                                                                                                                 (Potential)
                                                                                                                                                                                                                                                                    (Potential)
                                                                                                                                                                                                                      Potential)
                                                                                                                                                                                                                                                         (Potential)
                                                                                                                                                                                                                                                                                             (Potential)
                                                                                                                                                                                                                                                                                                          Potential)
                                                                                                                                                                                                                                                                                                                    (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                Potential)
                                                                                                                                                                                              Potential)
                                                                                                                                                                                                          Potential)
                                                                                                                                                                      Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 49; DB 1; Length 1013; Pred. No. 14; 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genome seguence of the nematode C.elegans: A platform for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=Bristol N2;
Wilkinson J.;
Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases.
EMBL; 274038; CAA98497.2; -.
PIR; T22904; T22904;
                                                                                                                                                                                                                                                                                                                                                                                                       MW; 03C5467D84527216 CRC64;
           Extracellular (Potential).
                       7 (Potential).
Cytoplasmic (Potential)
                                                                                                                                                                                                                                                                                                                                                                            Missing (in isoform 3). /FIId=VSP 009811.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q20975 PRELIMINARY; PRT; 578 AA. Q20975; Q10975; Q10975; Q10975; Q100741996 (TrEMBLrel. 01, Last sequence update) Q1-NOV-1996 (TrEMBLrel. 01, Last sequence update) Q1-MAR-2004 (TrEMBLrel. 26, Last annotation update) Hypothetical protein FSB4.1a. Name=FSB84.1a. Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                      (in isoform 2)
                                                                                                                    (GlcNAc.
(GlcNAc.
(GlcNAc.
                                                                                                                                                                                                                                                                    (GlcNAc.
                                                                                                                                                                                                                                                                                                        (GlcNAc.
(GlcNAc.
                                                                                                                                                                                (GlcNAC
                                                                                                                                                                                                                                 (GlcNAc.
                                                                                                                                                                                                                                                         GlcNAc
                                                                                                                                                                                                                                                                                                                                             (GlcNAc
                                                                                                                                                                      GlcNAC
                                                                                                                                                                                                        GlcNAc
                                                                                                                                                                                                                      (GlcNAc
                                                                                                                                                                                                                                                                                             (G1cNAc
                                                                                                                                                                                                                                                                                                                                                         Missing (i
/FTId=VSP
                                                                                                                                                                                                                                                                                                                              N-linked
N-linked
                                                                                                          N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
                                                                                                                                                                                                       N-linked
N-linked
N-linked
N-linked
N-linked
N-linked
                                                                                                                                                                                                                                                                                          N-linked
N-linked
N-linked
                                                                                 Poly-Lys.
Poly-Ser.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-Bristol N2;
MEDLINE-99069613; PubMed-9851916;
                                                                                                                                                                                                                                                                                                                                                                                                                               77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                          1013 AA; 110700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             investigating biology.";
Science 282:2012-2018(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 70...
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               774 CWINSSVVFY 783
8853
8853
8853
6114
6114
926
926
926
1104
1128
1128
1137
1159
811
1159
811
821
821
823
823
823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

```
Name=GPR112;
                                                 SEQUENCE
                                                                                                                                                                                                                                                G112_HUMAN
                                                                                                                                                                                                                             RESULT 6
 SKRR
                                                                                                                                                                            qq
                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S.,
A Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S.,
Lafontaine I., de Montigny J., Marck C., Neuveglise C., Talla E.,
A Goffard N., Frangeul L., Ajgle M., Anthouard V., Babour A., Barbe V.,
A Barnay S., Blanchin S., Beckerich J.M., Beyne E., Bleykasten C.,
A Despons L., Fabre E., Fairhead C., Ferry-Dumazet H., Groppi A.,
Hantraye F., Hennequin C., Jauniaux N., Joyet P., Kachouri R.,
A Kerrest A., Koszul R., Lemaire M., Lesur I., Ma L., Muller H.,
Nicaud J.M., Nikolski M., Oztas S., Ozier-Kalogeropoulos O.,
A Pellanz S., Poditer S., Richard G.F., Streaub M.L., Suleau A.,
Swennene D., Tekaia F., Wesolowski-Louvel M., Westhoff E., Mirth B.,
A Bouchier C., Caudron B., Scarpelli C., Gaillardin C., Weissenbach J.,
Mincker P., Souciet J.L.;
T. "Genome evolution in yeasts.";
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       glucosyltransferase.
ORFNames=KLLA0001221g;
Kluyveromyces lactis NRRL Y-1140.
Bukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Kluyveromyces.
                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Similar to sp|Q12001 Saccharomyces cerevisiae YOR002w ALG6
                                                                                                                                                                                                                                                                                                                                                                           2; Length 578;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genoscope;
Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; CR382124; CAH00219.1; -.
GO; GO:0016740; F:transferase activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
          WormPep; FSB4.1a; CE35881.

GO; GO:000823; F:astacin activity; IEA.
GO; GO:000823; F:metallopeptidase activity; IEA.
GO; GO:000823; F:metallopeptidase activity; IEA.
GO; GO:000823; F:metallopeptidase activity; IEA.
InterPro; IPR006209; EGF like.
InterPro; IPR006209; Reptidase_M12A.
InterPro; IPR006025; Peptidase_M12A.
InterPro; IPR006025; Peptidase_M12A.
InterPro; IPR003582; ShKT.
Pfam; PF01400; Astacin; 1.
PFam; PF014400; Astacin; 1.
PRINTS; PR004480; ASTACIN.
SMART; SM00254; ShKT; 1.
                                                                                                                                                                                                                                                                                                                          ll protein. -
578 AA; 64678 MW; 2975A841FE70E5E2 CRC64;
                                                                                                                                                                                                                                                        PROSITE; PS01180; CUB; 1.
PROSITE; PS00022; EGF 1; UNKNOWN 1.
PROSITE; PS01186; EGF 2; 1.
PROSITE; PS00142; ZINC_PROTEASE; UNKNOWN 1.
SEQUENCE 578 AA; 64678 MW; 2975A841FE701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            566 AA
                                                                                                                                                                                                                                                                                                                                                                          74.6%; Score 47; DB 70.0%; Pred. No. 18;
                                                                                                                                                                                                                                                                                                                                                                                                          1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
WormBase; WBGene00003549; F58B4.1.
                                                                                                                                                                                                                                                                                                                                                         Ouery Match
Best Local Similarity 70.0.
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          569 CWMNNNNFY 578
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CWINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN=NRRL Y-1140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=NRRL Y-1140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=284590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genolevures;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qecsge;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a cullaboration between the SWISS Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ibe.sib.ch).
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=22584407; PubMed=12679517; DOI=10.1073/pnas.0230374100; MEDLINE=22584407; PubMed=12679517; DOI=10.1073/pnas.0230374100; MEDLINE=22584407; PubMed=12679517; DOI=10.1073/pnas.0230374100; Medline D.K., Mednann J.G., Zeng H., Li F., Ranchalis J.E., Mortrud M.T., Brown A., Rodriguez S.S., Weller J.R., Wright A.C., Bergmann J.E., Gaitanaris G.A.; "The G protein-coupled receptor repertoires of human and mouse."; "The G protein-coupled receptor."; Proc. Natl. Acad. Sci. U.S.A. 100:4903-4908 (2003).
-!- FUNCTION: Orphan receptor.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SECUENCE FROM N.A.
PubMed=12435584; DOI=10.1016/S0014-5793(02)03574-3;
Predriksson R., Lagerstroom M.C., Hoeglund P.J., Scrioeth H.B.;
Novel human G protein-coupled receptors with long N-terminals
containing GPS domains and Ser/Thr-rich regions.";
PEBS Lett. 531:407-414(2002)
                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                        Length 566;
                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65161 MW; BEF7D2A4E2D6C074 CRC64;
                                                                                                                                                                 69.8%; Score 44; DB 2; 77.8%; Pred. No. 54; ive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G112 HUMAN STANDARD; PRT; 2799 AA. Q812F6; Q86SM6; 25-OCT-2004 (Rel. 45, Last sequence update) 25-OCT-2004 (Rel. 45, Last annotation update) G-protein coupled receptor GPR112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LN-TM7 subfamily.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conny, Inderior, Cond. like lec_gl.
InterPro; IPR008985; Cond. like lec_gl.
InterPro; IPR000832; GPCR_secretin.
InterPro; IPR000203; PKD_Cys_rich.
Pfam; PF000025; 7tm_2; 1.
Pfam; PF01825; GPS; 1.
InterPro; IPR004856; Alg6_Alg8.
Pfam; PP03155; Alg6_Alg8; 1.
Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIN'S; PRO0249; GPS; 1.
SMART; SMO303; GPS; 1.
PRO51TF. FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AY140954; AAN46668.1; -. EMBL; AY255581; AAO85093.1; -.
                                                                                                                                   Query Match
Best Local Similarity 7/...
Best Local 7/ Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genew; HGNC:18992; GPR112.
                                                                                                                                                                                                                                                                                                                                      427 CWINNVALF 435
                                                                                                                                                                                                                                                                                                    1 CWINNNAVF 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human)
                                                                                                        566 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THE PROPERTY OF THE PROPERTY O
```

ö

Gaps

; 0

```
Cheuk R., Shinn P., Brooks S., Buehler E., Chao Q., Johnson-Hopson C., Khan S., Kim C., Altafi H., Bei B., Chin C., Chiou J., Choi E., Conn L., Conway A., Gonzalez A., Hansen N., Howing B., Koo T., Lam B., Lee J., Lenz C., Lid, J., Liu A., Liu J., Liu S., Mukharsky N., Nguyen M., Palm C., Pham P., Sakano H., Schwartz J., Southwick A., Thaveri A., Toriumi M., Vaysberg M., Yu G., Davis R., Federspiel N., Theologis A., Ecker J.; Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chao Q., Shinn P., Dunn P., Buehler E., Kahn S., Kim C., Walker M., Williams S., Altafi H., Araujo R., Conn L., Conway A.B., Gonzalez A., Hansen N.F., Huizar L., Kremenetskaia I., Lenz C., Li J., Liu S., Luros S., Rowley D., Schwartz J., Toriumi M., Vysotskaia V., Yu G., Davis R.W., Federspiel N.A., Theologis A., Ecker J.R., Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                             Arabidopsis thaliana (Mouse-ear cress).

Bukaryota; Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                     content, chromosome organisation, recombination and polymorphism."; Nucleic Acids Res. 31:4864-4873(2003).
EMBL, AL929604; CAD53076.1; -.
Hypothetical procein.
SEQUENCE 128 AA, 15003 MW, 210093C812A19E37 CRC64;
Bray-Allen S.P., Bringaud F., Clark L.N., Corton C.H., Cronin A., Davies R., Dogsett J., Fraser A., Gruter E., Hall S., Harper A.D., Kay M.P., Leech V., Mayes R., Price C., Quail M.A., Rabbinowitch E. Reitter C., Rutherford K., Sasse J., Sharp S., Shownkeen R., Macleod A., Taylor S., Tweedie A., Turner C.M.R., Tait A., Gull K., Barrell B., Melville S.E., The DNA sequence of chromosome I of an African trypanosome: gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.

Yamada K., Chan M.M., Chang C.H., Dale J.M., Hsuan V.W., Lee J.M.

Yamada K., Chan H.L., Tang C., Toriumi M., Wong C., Wu H.C.,

Yu G., Yuan S., Carninci P., Chen H., Cheuk R., Hayashizaki Y.,

Ishida J., Jones T., Kamiya A., Kawai J., Kim C.J., Narusaka M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE-2208475; PubMed=12093376;
MEDLINE-2208475; PubMed=12093376;
Haas B.J., Volfovsky N., Town C.D., Troukhan M., Alexandrov Peldmann K.A., Flavell R.B., White O., Salzberg S.L.;
"Full-length messenger RNA sequences greatly improve genome annotation.";
Genome Biol. 3:RESEARCH0029-RESEARCH0029 (2002).
                                                                                                                                                                 Length 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
Brover V., Troukhan M., Alexandrov N., Lu Y.-P., Flavell
Feldmann K.;
                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                 66.7%; Score 42; DB 2;
55.6%; Pred. No. 27;
cive 2; Mismatches
                                                                                                                                                                                                                                                                                                            168 AA.
                                                                                                                                                                                                                                                                                                                                                                        F10B6.7 (Hypothetical protein At1g14687). Name=At1g14687;
                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                   01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15, 05-JUL-2004 (TrEMBLrel. 27,
                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                   CWFNNNNIY 89
                                                                                                                                                                                                                    1 CWINNNAVF 9
                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=3702;
                                                                                                                                                                                           5;
                                                                                                                                                                                                                                                                                                            Q9LQW3
                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                   RESULT 8
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRANB=TRED927;
Hall N., Berriman M., Lennard N.J., Harris B.R., Hertz-Fowler C.,
Bart-Delabesse E.N., Gerrare C.S., Atkin R.J., Barron A.J., Bowman S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 varies,
01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last sequence
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein Tb927.1.1490.
Name=Tb927.1.1490;
Trypanosoma brucei.
Bukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
NCBI_TaxID=5691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                        (Potential).
                                                                                                                                                                                                                                                                                   (Potential)
                                                                                                                                                                                                                                                                                                            (Potential)
                                                                                                                                                                                                                                                                                                                                                   Potential)
                                                                                                                                                                                                                                                                                                                                                                           (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                   (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                           Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                        (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Potential)
                                                                                                                                                                                                                                                                                                                                                                                       (Potenti
                                                                                                                                                                                                                                                                                                                                                               Potent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Potent:
                                                                                                                                                                                                                                                                                                                                                                                                                (Potent:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Potent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 2799;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MW; D3A31C9702A87B50 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
           Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
                                                                          4 (Potential).
Extracellular (Potential)
                                                                                                                             6 (Potential).
Extracellular (Potential)
                                                               (Potential).
                                                                                                               Cytoplasmic (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 43; DB 1; I
Pred. No. 3.8e+02;
I; Mismatches 1;
                                                                                                                                                                                                                                                                                  (GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GlcNAc.
                                                                                                                                                                                                                                GlcNAc.
                                                                                                                                                                                                                                              GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlcNAc.
                                                                                                                                                                                                                    GlcNAc.
                                                                                                                                                                                                                                                                                                            GlcNAc.
                                                                                                                                                                                                                                                                                                                                                               GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                   GlcNAc.
                                                                                                                                                                                           CNAC.
                                                                                                                                                                                                        GlcNAc.
                                                                                                                                                                                                                                                          GlcNAc.
                                                                                                                                                                                                                                                                                                                                                 GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                     CNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                            GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                        GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlcNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GlcNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GlcNAc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlcNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GlcNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GlcNAc
                                                   (Potential).
                                                                                                     (Potential)
                                                 3 (Potential
Cytoplasmic
                                                                                                                                                                                                                                                                                                                                                                                                                                       N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-linked
                                                                                                                                                                                N-linked
                                                                                                                                                                                           N-linked
                                                                                                                                                                                                       linked
                                                                                                                                                                                                                    N-linked
                                                                                                                                                                                                                                              N-linked
                                                                                                                                                                                                                                                                                                                                                 N-linked
                                                                                                                                                                                                                                                                                                                                                                                                   N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                           N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [|| ::::||
2634 CWIKDDSIFY 2643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY:
                                                                          2618
2640
2661
2690
                                                                                                                             2711
2799
22483
2209
103
169
224
271
                                                                                                                                                                                                                                                                                                                                                                                     1335
1369
1455
1504
1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 À.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2029
2218
22218
23256
23322
23324
23391
2462
2799
                                                                                                                                                                                                                                                                                                                                                                         989
1335
1369
1455
                                                                                                                                                                                                                                                                                                                                                                                                                                     1659
             2513
2528
2528
2549
2555
                                                                                                   2641
2662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5,
                                                                                                                                                                                                                                                                                                          CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                   CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
             DOMAIN
TRANSMEM
                                     DOMAIN
TRANSMEM
DOMAIN
TRANSMEM
DOMAIN
                                                                                                                                                                  DOMAIN
CARBOHYD
                                                                                                                                                                                                                                                        CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                  CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARBOHYD
CARBOHYD
                                                                                                                             TRANSMEM
DOMAIN
                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
 FRANSMEM
                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QBIFE2;
                                                                                                               DOMAIN
                                                                                                                                                      DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QBIFE2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Graphiurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=1cat;
                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q70UX2
Q70UX2;
                                                                                                                                                                                                                                                 Q7RLD7
                                                                                                                                                                                                     RESULT 10
Q7RLD7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                          ò
                                                                                                                                    В
                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=20538273; PubMed=11083941; DOI=10.1006/mpev.2000.0849; Michaux J.R., Catzeflis F.M.; "The bushlike radiation of murroid rodents is exemplified by the molecular phylogeny of the LCAT nuclear gene."; MOL. Phylogenet. Evol. 17:280-293 (2000). "EmBL; AJ275538; CAC18113.1; JOINED. EMBL; AJ275540; CAC18113.1; JOINED. EMBL; AJ275541; CAC18113.1; JOINED. EMBL; AJ275541; CAC18113.1; JOINED. EMBL; AJ275541; CAC18113.1; JOINED. GG; GO:0004607; F:Dhosphatidylcholine-sterol O-acyltransferase activity; IEA. CG; GO:0006629; P:Lignaferase activity; IEA. "F. Transferase activity; IEA. "F. Tr
                                                                                                      SEQUENCE FROM N.A.

Yamada K., Chan M.M., Chang C.H., Dale J.M., Hsuan V.W., Lee J.M.,

Yamada K.S., Quach H.L., Tang C., Toriumi M., Wong C., Wu H.C.,

Yu G., Yuan S., Carninci P., Chen H., Cheuk R., Hayashizaki Y.,

Ishida J., Jones T., Kamiya A., Kawai J., Kim C.J., Narusaka M.,

Nguyen M., Palm C.J., Sakurai T., Satou M., Seki M., Shinn P.,

Southwick A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker J.R.,

Shubmitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.
Nguyen M., Palm C.J., Sakurai T., Satou M., Seki M., Shinn P.,
Southwick A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Calomyscinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 66.7%; Score 42; DB 2; Length 168; Best Local Similarity 66.7%; Pred. No. 36; Matches 6; Conservative 1; Mismatches 2; Indels
                                            Theologis A.; Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                            Infoatogle A.;
Submitted (MAR.2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AC006917; AAF79220.1; -.
EMBL; BT008942; AAM63522.1; -.
EMBL; BT003942; AAO41987.1; -.
EMBL; BT005027; AAO41987.1; -.
EMBL; BT005027; AAO404565; Howeo ZF HD.
InterPro; IPR006455; Howeo ZF HD.
Pfam; PF04770; ZF-HD_dimer; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                il protein. _ _ _ _ 19922 MW; BFB868E8E0A32B94 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268 268
268 AA; 30975 MW; E733B8D375EA2533 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Lecithin cholesterol acyl transferase (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Calomyscus mystax (Afghan mouse-like hamster)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    268 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF02450; LACT; 1.
PROSITE; PS00120; LIPASE_SER; UNKNOWN_1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGRFAMS; TIGR01565; homeo_ZF_HD; 1.
TIGRFAMS; TIGR01566; ZF_HD_Drot_N; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IPR008262; Lipase_AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR003386; LACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     159 WVNNNKKFY 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 WINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=109677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Calomyscus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=lcat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
Q9EPES
  ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carucci D.J.; "Genome sequence and comparative analysis of the model rodent malaria "Genome sequence".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paranal Jacob State Stat
                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata, Craniata, Vertebrata, Euteleostomi,
Rodentia, Sciurognathi, Myoxidae, Graphiurinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Plasmodium yoelii yoelii.
Eukaryota, Alveelata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=73239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 779;
Length 268,
                                                                            2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 parasite Plasmodium yoelii yoelii.";
Nature 419:512-519(2002).
-!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .1 protein.
779 AA; 92558 MW; BF20EE74D050B462 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-WAR-2004 (TrEMBLrel. 26, Created)
01-WAR-2004 (TrEMBLrel. 26, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUL_2004 (TrEMBLrel. 27, Created)
05-JUL_2004 (TrEMBLrel. 27, Last sequence update)
05-JUL_2004 (TrEMBLrel. 27, Last annotation update)
Lecithin cholesterol acyl transferase (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66.7%; Score 42; DB 2; Le
100.0%; Pred. No. 1.6e+02;
ive 0; Mismatches 0;
       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         105 AA
   Score 42; DB :
Pred. No. 56;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             779 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Montgelard C., Matthee C.A., Robinson T.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  preliminary data.
EMBL; AABLO1000716; EAA22076.1; -.
Inter-pro; IPR001279; Blactmase-like.
Pfam; PF00753; Lactamase_B; 1.
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Graphiurus placyops (rock dormouse)
       66.78;
                                  60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 6; Conservative
                                                                                6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                 1 CWINNNAVFY 10
                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hypothetical protein.
Name=PY02609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa,
Mammalia, Eutheria,
                                                                                                                                                                                               CWIDNTSVVY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433 CWINNN 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=221699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CWINNN 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
```

α

```
Local Similarity 60.0 nes 6, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |||:| | CWIDNTRVIY 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CWIDNTRVIY 26
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Graphiurus.
NCBI_TaxID=221682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                 NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q70UX0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q70UW9
                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      070UX0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   270UW9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DDT TANKER TO THE TOTAL TO THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Graphiurus ocularis (spectacled dormouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Myoxidae, Graphiurinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dryomys laniger (woolly dormouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Myoxidae, Leithiinae,
                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                           65.1%; Score 41; DB 2; Length 105; 60.0%; Pred. No. 33; tive 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65.1%; Score 41; DB 2; Length 125; 60.0%; Pred. No. 39; ive 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Montgelard C., Matthee C.A., Robinson T.J.;
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ536374; CAD67332.1; -.
GQ; GO:0016740; Fitransferase activity; IEA.
InterPro; IPR00386; LACT.
InterPro; IPR008262; Lipase_AS.
  (DEC-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                            1
105
105 AA; 11769 MW; A52FDB70A7B2F5CC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1
125 125
125 AA; 14467 MW; 1156855CEAB7B97D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Lecithin cholesterol acyl transferase (Fragment).
Name-lcat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lecithin cholesterol acyl transferase (Fragment)
                      EMBL; AJ536378; CAD67534.1; -. GO: GO: 0016740; F: transferase activity; IEA. Interpro; IPR003386; LACT. Pfam; PF0450; LACT; 1. Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF02450; LACT; 1.
PROSITE; PS00120; LIPASE_SER; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUL-2004 (TrEMBLrel. 27, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 60.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                               Local Similarity 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                       1 CWINNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                       17 CWIDNTRVIY 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CWINNNAVFY 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 CWIDNTRVIY 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=221696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=221698;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Graphiurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=lcat;
                                                                                                                                                               NON TER
NON TER
SEQUENCE
  Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dryomys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q70UX1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                970UX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q70UX1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
7000X
AC 0700X
AC 0700X
DT 05-JU
DT 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Montgelard C., Matthee C.A., Robinson T.J.;

Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AJ536381; CAD67541.1; -
GO, GO:0004607; F:phosphatidy-Icholine-sterol O-acyltransferas. . .; IEA.

GO, GO:0006629; P:lipfd metabolism; IEA.

InterPro; IPR00386; LACT.

InterPro; IPR003262; Lipase—AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=lcat;
Graphiurus lorraineus (Lorrain dormouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Myoxidae; Graphiurinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                              65.1%; Score 41; DB 2; Length 126; 60.0%; Pred. No. 39; 1.1ve 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65.1%; Score 41; DB 2; Length 136; 60.0%; Pred. No. 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
Montgelard C., Matthee C.A., Robinson T.J.; Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases. EMBL; A536379; CAD67539.1; -. GO; GO:0016740; F:transferase activity; IEA. InterPro; IPR003386; LACT. InterPro; IPR003262; Lipase_AS. InterPro; IPR00379; Ser_esErs.
                                                                                                                                                                                                                                                                                                  126 126
126 AA; 14461 MW; DC978F5758D24EEB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      136 AA; 15779 MW; C4477D97DC9B96B4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               070UX0;
05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Locithin cholesterol acyl transferase (Fragment).
Name=lcat;
Graphlurus parvus (savanna dormouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lecithin cholesterol acyl transferase (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           136 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
                                                                                                                                                                                       Pfam; PF02450; LACT; 1. -
PROSITE; PS00120; LIPASE_SER; UNKNOWN_1.
Transferase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF02450; LACT; 1. PROSITE; PS00120; LIPASE_SER; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          070UM9;
05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last seq
05-JUL-2004 (TrEMBLrel. 27, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
```

Search completed: October 20, 2005, 05:54:14 Job time : 59 secs

g 8

#### THIS PAGE BLANK (USPTO)